### **SCHEME OF EXAMINATION**

&

### **SYLLABUS**

**OF** 

# POST GRADUATE DIPLOMA IN EQUITY RESEARCH

for

**Academic Session 2021-22 Onwards** 



GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY Sector-16 C, Dwarka, New Delhi-110078 (INDIA). www.ipu.ac.in

### GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, NEW DELHI

### **PROGRAM OUTCOMES (POs)**

PO1: Generate creative, innovative, and robust solutions to predict the returns and volatility in the equity markets.

PO2: Apply knowledge generated through equity research for maximization of returns in the global equity markets.

### **Evaluation**

The evaluation shall involve 25 marks for continuous evaluation and 75 marks for final examination.

### **Criteria for Continuous Evaluation**

The continuous evaluation of the students shall be marked out of 25 marks. The criteria for continuous evaluation shall be decided by the faculty delivering the course under intimation to the Dean (USMS)/ Coordinator (PG Diploma Programs, USMS). Conducting one written exam shall be mandatory for each course.

### **Final Examination**

The final examination shall be conducted by the university in consultation with the industry partner(s). The MOOC/NPTEL/Similar courses shall be completed by the student on his/her own, and the documentary proof of completion shall be submitted to the university.

### **Maximum and Minimum Credits for the Program**

Total number of Credits for the PGDER program is 60. For the award of the diploma, the student is required to complete 56 credits.

### **Multiple Exit**

The student who completes the first semester (with at least 28 credits) may opt to exit from the program. Such student shall be awarded 'Six-Month Certificate Course in Equity Research'.

Note: The scheme and Syllabus is as per the ordinance 11 of the University

### GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, NEW DELHI

### POST GRADUATE DIPLOMA IN EQUITY RESEARCH

### FIRST SEMESTER

Code No.	Course Name	L	T/P	Credits
PGDER-101	Financial System	3	-	3
PGDER -103	Personal Finance Skills*	2	2	3
PGDER -105	Business Communication and Managerial Skill Development*	2	2	3
PGDER -107	Management Process and Organizational Behaviour	3	-	3
PGDER -109	Information Technology for Finance	3	-	3
PGDER -111	Investment Research Skills-I*	2	2	3
PGDER - 113	Choice based Online Open Course (MOOC)	1	-	3
PGDER - 115	Open Elective	ı	-	3
PGDER -117	Project – I*	ı	6	6
Semester Credits				30

# GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, NEW DELHI POST GRADUATE DIPLOMA IN EQUITY RESEARCH

### **SECOND SEMESTER**

Code No.	Course Name	L	T/P	Credits
PGDER-102	Investment Analysis and Portfolio Management	3	-	3
PGDER -104	Macro and Mathematical Economics	3	-	3
PGDER -106	Financial Modelling*	2	2	3
PGDER -108	Advanced Technical Analysis*	2	2	3
PGDER -110	Sustainable Finance	3	-	3
PGDER -112	Behavioural Finance*	2	2	3
PGDER -114	Investment Research Skills-II*	2	2	3
PGDER -116	Open Elective	-	-	3
PGDER -118	Project – II*	-	6	6
Semester Credits			30	

Total Credits = $\underline{60}$	
To obtain the degree, the student shall require 56_Credits	

FIRST SEMESTER

### **Financial System**

Course Code: PGDER-101 L – 3, Credits – 3

**Course Outcomes:** To provide the student a basic knowledge of financial markets and institutions and to familiarize them with major financial services in India.

### Unit I:

**Financial Markets**: Financial system and its components, functions; money market, instruments, types, regulations, Role of central bank in money market; capital markets, types, products, reforms; primary market, book building process; corporate debt market, financial markets and economic development; SEBI and recent reforms.

### Unit II:

Banking Sector: Banking sector in India, role of RBI, commercial banks, foreign banks, reports of important committees, functions of a bank, products, assets and liabilities of banks; Non-performing assets, growth and performance of Indian banking sector; E-banking; role and scope of payment banks, RBI, functions, objectives and reforms; recent trends in banking sector.

### **Unit III:**

**Financial Institutions**: Ministry of Corporate Affairs; Non-banking financial companies (NBFCs); Life and non-life insurance companies in India, IRDA and recent reforms; Pension Fund Regulatory and Development Authority; Development Financial Institutions (DFIs); Mutual Funds, instruments, growth and performance of mutual funds; Housing finance.

Unit IV: Emerging Trends in Finance: Payment banks, Unified payments interface, Bad banks, Fintech, Cryptocurrencies, Digital security, other recent and emerging trends

- 1. Bhasin, N. Financial Institutions & Financial Markets in India: Functioning & Reforms. New Century Publications.
- 2. Fabozzi., F. J. Bond Markets Analysis and Strategies. Pearson Education.
- 3. Khan, M. Y. *Indian Financial System*. McGraw Hill Education.
- 4. Mishkin, F. S., & Eakins, S. Financial Markets and Institutions. Pearson Education.

### **Personal Finance Skills**

Course Code: PGDER-103 L-2, P-2, Credits -3

**Course Outcomes:** To enable the understanding of individual financial needs and making effective financial planning decisions.

### Unit I:

Planning for Personal Finance: Process of Planning and Personal Finances, Rewards for Sound Financial Planning, Personal Financing Goals, Planning Environment, Determinants of Personal Income. Mapping Financial Future, Balance Sheet of one's present worth, Income and Expenses Statement- What you earn and where you spend it, preparing and using personal financial statements, preparing and using budgets, putting a dollar value on financial goals (time value of money). Understanding Income Tax Principles, Effective Tax Planning. Role of Cash Management in Personal Financial Planning, Cash Management Products, Establishing a Saving Program.

#### Unit II:

**Shelter Management:** Meeting House Needs, Buy or Rent, Financial Criteria for buying a house, How much housing one can afford, home buying process, buying an automobile, Financing Decision of Buying a car. Credit Management, Credit Use, Basic Concept of credit, different types of credits, principles of using credit wisely, features of consumer loans, single payment loans and installment loans.

### **Unit III:**

**Insurance:** Basic concept, need of insurance, how much life insurance is right, choosing a right policy, key features of life, insurance policies, buying an insurance policy. Health Insurance: importance of health insurance, health insurance policies, health insurance decisions- coverage of expenses and policy provisions, health insurance check list, long term care insurance, disability insurance, property insurance, principles of property insurance, home insurance, automobile insurance, other property and liability insurance. Anything insurance claim settlement.

### **Unit IV:**

**Investments:** Planning Objectives, reward of investing, determination of amount of investment, securities market-types of securities, investment decisions, managing investment portfolio. Investing in Bonds- risks and benefits. Mutual funds investment, types of funds, funds services, choosing a best mutual fund, investing in real estate, investing in gold, investing in gold ETF. Retirement planning: overview, social security, pension plans, retirement programs. Estate Planning – principles of estate planning, trusts, estate taxes, estate planning Techniques. Tips for preparing a will.

- 1. Arora, M. Rat Race to Financial Freedom. Jaico Publishing House.
- 2. Bennand, J. W., & Ralph, R. F. Personal Finance. Pearson Education.
- 3. Chaudhary, P. Your Everyday Guide to Personal Finance & Insurance. Network Publications.
- 4. Joehnk, Billingslyey, & Gitman. Planning your personal finances. Cengage Publishing.

### **Business Communication and Managerial Skill Development**

Course Code: PGDER-105 L-3, T/P-2 Credits -3

**Course Outcomes:** To train students to enhance their skills in written and oral communication through practical conduct of this course; and to help students develop competence in communication so that they can successfully handle the challenges of all types of communication in business.

#### Unit I

Fundamentals of Business Communication: Business Communication — Definition, Importance, Forms and Types of Communication (Downward, Upward, Horizontal and Lateral Communication), Formal and Informal Communication Networks, Process of Communication, Barriers and Gateways to Communication.

### **Unit II**

Communication Modes and Business Etiquettes: Resume Writing, Business Communication via Social Network, Writing a Blog, Video-conferencing and Skype, Non – Verbal Communications, Group Discussion and Employment Interview, Business Etiquettes and Professionalism, Introduction and Greetings, Dressing and Grooming, Gifting in Business, Public Speaking, Negotiation and its relevance in Business Communication, Mass Communication.

### **Unit III**

Communication Analytics: Cognitive Bias in Communication, Persuasion and Influence in Communication, Elevator Pitch Building: A Narrative, Effective Listening & Feedback, Critically Understanding & Communicating, Logical Rigour, Analytical & Argumentative Writing, Business Writing, Executive Summary, Business Plan Presentation, Conversational Competence, Communicating and Networking, Crisis Communication, Writing Tough and Difficult Messages, Email Writing, Business Presentation.

### **Unit IV**

Practical Insights: Workshop on Interviews and Presentations, Written Analysis and Communication, Communicating Corporate Reputation, Intercultural Communication Competence, Strategic Communication in Digital Era, Strategic Negotiation Skills for Leaders.

- 1. Bovee, C., Thill, J., & Raina, R. Business Communication Today. Pearson Education.
- 2. Ihlen, O., & Health, R. L. *The Handbook of Organizational Rhetoric and Communication*. Wiley Blackwell Publications.
- 3. Lerbinger, O. *Corporate Communication: An International and Management Perspective.* Wiley Blackwell Publications.
- 4. Lesikar, R., Flatley, M., Rentz, K., & Pande, N. *Business Communication: Connecting in a Digital World.* McGraw Hill Education.

### **Management Process & Organizational Behaviour**

Course Code: PGDER-107 L – 3, Credits – 3

**Course Outcomes:** To expose the students to fundamental concepts of management, its processes and behavioural dynamics in organizations.

### Unit I:

**Introduction to Management:** Meaning and Nature of Management, Evolution of Management, Managerial Functions, Skills, Tasks and Responsibilities of a Professional Manager, Management by Objectives. Case Study

### Unit II:

**Process of Management:** Planning Process and Techniques, Direction – Principles and Process, Controlling – Techniques, Decision Making Models. Case Study

### **Unit III:**

Fundamentals of Organizational Behavior: Introduction and Meaning, OB Models & Approaches, Work Force Diversity, Organizational Justice, Whistle Blowing and Social Responsibility, OB Trends, Case study

Individual Processes and Behavior: Personality, Perception, Attitude, Learning, Motivation, Managing Emotions and Stress at Work.

### **Unit IV:**

Interpersonal Processes and Behavior: Work Teams and group Dynamics, Leadership, Conflict Management, Interpersonal Behavior and Relations Transactional Analysis, Case Study.

Organizational Processes and Structure: Organizational Design and Structure, Organizational Culture and Climate, Organizational Change and Development, Cross Cultural Organizational Behavior.

- 1. Colquitt, J., LePine, J., & Wesson, M. *Organizational Behavior: Improving Performance and Commitment in the Workplace.* McGraw Hill Education.
- 2. Nahavandi, A., Denhardt, R. B., Denhardt, J. V., & Aristigueta, M. P. *Organizational Behaviour*. Sage Publications.
- 3. Robbins, J. S. Organizational Behaviour. Pearson Education.
- 4. Robbins, S. P., Judge, T. A., & Vohra, N. Organizational Behaviour. Pearson Education.
- 5. Schermerhorn, J., Osborn, R., Uhl-Bien, M., & Hunt, J. *Organizational Behaviour*. Wiley Publication.

### **Information Technology for Finance**

Course Code: PGDER-109 L - 3 Credits - 3

**Course Outcomes**: To familiarize the student with basic concepts of information technology and their applications to business processes.

#### Unit I

**Computer Hardware and Number System:** - CPU, Computer Memory and Mass Storage Devices, Computer Hierarchy, Input Technologies, Output Technologies. Number Systems and Arithmetic: Decimal, Binary, Octal and Hexadecimal Number Systems, Binary Arithmetic.

### Unit II

Computer Software: Application and System Software, Programming Languages and their Classification, Assemblers, Compilers and Interpreters. Process of Software Development, Data Analysis using Spreadsheets Operating Systems- Functions of Operating Systems, Types of Operating Systems (Batch Processing, Multitasking, Multiprogramming and Real time Systems), DBMS: Traditional File concepts and Environment, Database Management Systems Concepts, Types of Data Models, ER Modeling, Integrity Constraints, SQL queries.

#### **Unit III**

**Data Communication and Networks:** Concepts of Data Communication, Types of Data-Communication Networks, Communications Media, Concepts of Computer Networks, Primary Network Topologies, Network Architectures-The OSI Model, Inter-Networking devices. The Internet, Intranet and Extranets: Operation of the Internet, Services provided by Internet, World Wide Web, Creating Web Pages using HTML, Intranets and Extranets.

(12 Hours)

### **Unit IV**

Functional and Enterprise Systems: Data, Information and Knowledge Concepts, Decision Making Process, Physical Components of Information Systems, Classification of Information Systems. Overview of Security Issues in Information Technology, Emerging Trends in Information Technology.

(10 Hours)

- 1. Behl, R. Information Technology for Management. McGrawHill Education.
- 2. Brady, J. A., & F., E. M. Problem Solving Cases in Microsoft and Excel. Thomson Learning.
- 3. Dhingra, S., & Tondon, A. *Introduction to Information Technology*. Galgotia Publishing House.
- 4. Turban, Rainer, & Potter. Introduction to Information Technology. John Wiley and Sons.

### **Investment Research Skills - I**

Course Code: PGDER -111 L-2, T/P-2 Credits -3

**Course Outcomes:** To provide the foundation in theories and techniques of equity pricing. The aim of the course is to develop understanding of the valuation tools and techniques that are applied to pricing of securities.

### Unit I

Introduction to Financial Statements-Understanding Financial Statements- Balance Sheet, Profit and Loss Statement, Cash Flow Statement; Sources of Data for Financial Statements; Financial Statement Analysis- Comparative Statements, Common Size Percentages, Trend Analysis, Ratio Analysis (10 Hours)

### Unit II

Corporate Finance- Time Value of Money Concept and Wealth Maximization Principle; Cost of Capital and Capital Structure, Evaluating Investments-Capital Budgeting Techniques- Discounted Cash Flow and Traditional Methods of Evaluation; Risk Analysis in Capital Budgeting- Statistical Techniques and Conventional Techniques

### **Unit III**

Introduction to Valuation- Approaches to Asset Valuation; Fundamental Analysis- Economic Analysis; Industry Analysis- Factors Affecting Industrial Performance, Porter's Five Forces Model, SWOT Analysis, PESTEL Model, MOATS Vs FLOATS; Company Analysis- Financial Health of the Company, Understanding Revenue and Growth Drivers and Competitive Positioning

### **Unit IV**

Equity Analysis and Investment Basics- Overweight Vs Underweight Sectors; Growth Stocks, Value Investing; Defensive and Cyclical Stocks, Investing in Blue-Chip Stocks

### **Suggested Text Books:**

- 1. Fridson, Martin S., & Alvarez, Fernando. *Financial Statement Analysis: A Practitioner's Guide*, 4<sup>th</sup> Ed., Wiley Finance
- 2. Pandey, I.M. Financial Management, 12th Ed., Pearson
- 3. Damodaran, A. *Investment Valuation: Tools and Techniques for Determining the Value of any Asset*, 3<sup>rd</sup> Ed., Wiley Finance
- 4. Krantz, M. Fundamental Analysis for Dummies, 2<sup>nd</sup> Ed.
- 5. Graham, B. The Intelligent Investor, Harper Collins
- 6. Dun & Bradstreet. Equity Research and Valuation. McGraw Hill.

### **Choice based Online Open Course (MOOC)**

Course Code: PGDER-113	Credits – 3
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The student can take any choice based online open course (MOOC) worth three credits.

### **Open Elective**

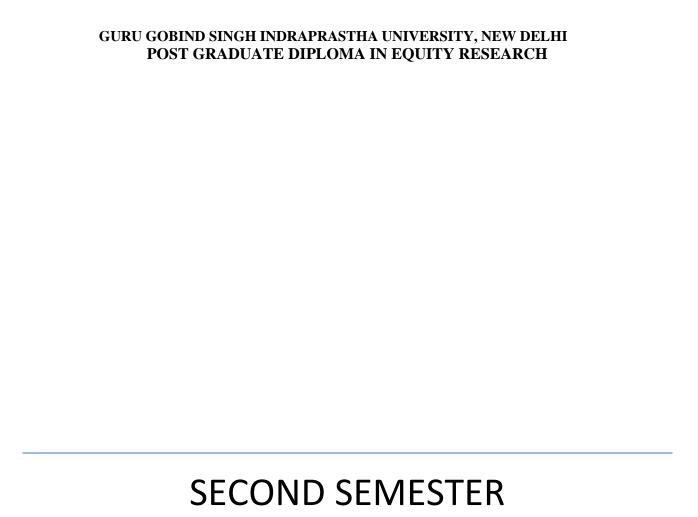
Course Code: PGDER-115 Credits – 3

The student can take any open elective worth three credits from any University School of Studies from the university.

### Project – I

Course Code: PGDER-117 L - 0, Credits - 6

The students shall prepare a project report based on their research/internship and submit it to the school for evaluation purposes. A viva-voce examination shall be conducted.



### **Investment Analysis & Portfolio Management**

Course Code: PGDER-102 L-3, Credits -3

**Course Outcomes:** To provide students with a solid conceptual and analytical basis for making investment decisions, and to establish a background for evaluating financial risk and return dynamics.

#### Unit I

Investment: Meaning, Nature and Scope, Features of Investment, Investment Process, Investment Avenues, Investment Environment, Capital Markets and Security types, Seeking Investments in a Global Market, Concept of Risk, Types of Risks, Return on Investments, Time Value of Money, Computation of Returns and Risk of a security and Portfolio, Relationship between Risk and Return, Correlation, Covariance and Coefficient of determination, Beta of a security and Portfolio, Division of total risk to systematic and unsystematic risk.

### Unit II

Capital Market Efficiency: Forms of Efficiency, Efficient Market Hypothesis, Diversion from Efficiency, Measurement of Efficiency of the Financial Markets.

Modern Portfolio Theory, Efficient Frontier, Efficient Frontier and Investor's Utility, Indifference Curve of an Investor, Equilibrium of an Investor, Single Index Model, Capital Market Theory, Capital Asset Pricing Model, Multifactor Models of Risk and Return: Arbitrage Pricing Theory, French and Fama Model.

### **Unit III**

Valuation Principles and Practices: Analysis of Financial Statements, Macro analysis and Micro Valuation of the Stock Market, Industry Analysis, Company Analysis and Stock Valuation, Valuation of Equity, Equity Valuation Methods, Technical Analysis. Concept of Bonds, Term Structure of a Bond, Yield of a Bond, Duration of a Bond, Valuation of Bonds

### **Unit IV**

Portfolio Management and Evaluation: Portfolio Building, Portfolio Management Strategies, Valuation of a Portfolio, Sharpe, Jensen, Treynor, Sortino, Fama-French, Information Ratio Models of portfolio valuation.

- 1. Bodie, Kane, Marcus, & Mohanty. Investments. Tata McGraw Hill Publication.
- 2. Chandra, P. Investment Analysis and Portfolio Management. Tata McGraw Hill Publication.
- 3. Reilly, F., & Brown, K. Investment Analysis and Portfolio Management. Cengage Learning.
- 4. Talwar, S. Security Analysis and Portfolio Management. Cengage Publication.

### **Macro and Mathematical Economics**

Course Code: PGDER-104 L-3, Credits -3

**Course Outcomes:** To have understanding of basic framework of principles of Marco Economics and Applied Mathematical Economics. This learning shall provide support in business decision making at strategic level.

### Unit I

**Introduction:** Macroeconomics vs. Microeconomics, Branches of Macroeconomic theory, Structure of Macro Model, Multipliers, Stabilizations, Business Cycles. National Income Accounting. Capital Mobility, Exchange Rate Systems.

#### **Unit II**

**Keynesian Economics;** Aggregate Demand and Supply Functions, Voluntary Unemployment, Underemployment, Ineffectiveness of Monetary Policy, Theory of Income and Employment, Money Market and Keynesian Demand for Money; IS-LM Model, Keynes vs. Hayek vs. Marx.

#### Unit III

**Mathematical Concepts:** Application of Convexity, Continuity Functions on Theory of the Firm. Consumer Theory. Profit Maximizing Firms, Cost Benefit Analysis.

### **Unit IV**

**Application:** Probability Density Function for Measurement of Economic Growth. Conversions, Continuous Discounting/ Compounding, Existence of Nash Equilibrium, Prisoner's Dilemma and its application on Duopoly, Monopolistic Competition, Non-Cooperative Game Theory, Rent Seeking Behavior.

- 1. Chaing, A., & K., W. Fundamental Methods of Mathematical Economics . Mcgraw Hills Higher Education.
- 2. Chako, G., Sjoman, A., Motohashi, H., & Dessain, V. *Credit Derivatives: A Primer on Credit Risk, Modeling and Instruments.* Wharton School Publishing.
- 3. Dixit, A., & Nalebuff, B. *Thinking Strategically: The Competetive Edge in Business, Politics and Everyday Life.* New York: W.W. Norton & Company.
- 4. Froyen. Macroeconomics: Theories and Policies. Pearson.

### **Financial Modelling**

Course Code: PGDER-106 L – 3, Credits – 3

**Course Outcomes:** To learn the application of MS-Excel in the financial modelling.

### Unit I

**Excel as a tool in Financial Modelling:** Excel concepts - Basic commands; Functions - math's, logical, look up, date, text and financial; Chart, diagram, picture, background, auto format, conditional formatting, style, filter, sort; Formulas and macros; What if analysis, pivot table, pivot chart, scenario, goal seek, problem solver tool, advanced filter.

### **Unit II**

Financial Modelling Basic Concepts: Introduction, Advanced functions of MS-Excel as a tool in financial modelling; Components of a financial model, building the template, filling in the historical data, identifying assumptions and drivers, forecasting various schedules and financial statement, building the supporting schedules, various approaches to valuation, key ratios, financial ratios and company analysis, building cases and sensitivity analysis - looking at the probabilistic analysis of the best and worst case scenario.

### Unit III

Cash Ratios and Non Cash Valuations: Cash Ratio - Structured model with a menu & accounting statements, Calculating key financial ratios, Deriving an international cash flow; Non Cash Flow Valuations - Accounting methods, Dividend discount models, Market-based methods - EPS and multiples, Fundamentals of EV/EBITDA, EV/Sales, Peer groups.

### **Unit IV**

Forecasting Methods and Initial Valuations: Review of forecasting methods, relationship between company and financial strategy, identifying and forecasting key drivers, linkages and modelling problems, deriving free cash flow; Cost of capital and initial valuation - alternative theories – bonds and arbitrage pricing theory, capital asset pricing model constituents, asset and equity betas, mathematical derivation, methods of adding terminal value, producing an equity valuation, comparison to existing share price.

**Note:** Students are expected to keep themselves updated with latest developments in the subject from financial dailies like The Economic Times, Financial Express etc., watch business channels e.g. CNBC, NDTV Profit, ET Now etc. and get updates from websites of SEBI, NSE etc.

- 1. Day, Alastair; *Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance,* Pearson Education.
- 2. Jonathan Swan; *Practical Financial Modelling a guide to current practice*, CIMA publishing Publication

### **Advanced Technical Analysis**

Course Code: PGDER-108 L-3 Credits: 3

**Course Outcomes:** To develop the practical skills in trading stock, commodity and currency market using advance concepts, tools and techniques of technical analysis to become a successful trader.

### Unit 1

Technical Analysis- Meaning, Basic Assumptions, Rationale of Technical Analysis, Strengths and Weakness of Technical Analysis, Difference between Fundamental and Technical Analysis, Dow Theory – Assumptions, Study of past Prices and Volumes, Charts types – Bar Charts, Point and Figure Charts, Candle Stick Charts, Concept of Support and Resistance, Trend – Meaning and Types of Trend, Key skills required to identify a trend.

### **Unit-II**

Introduction to Japanese Candlestick basic technique, different type of candle stick charts and patterns covering Bullish Reversal, Bullish Continuation, Bearish Reversal, Bearish Continuation and Candlesticks that Reflect Indecision (Head and Shoulder, Inverted Head and Shoulder, Hammer, Inverted Hammer, Bullish/Bearish Engulfing, Bullish/Bearish Harami, Piercing Line, Bullish Doji Star, Evening Doji Star, Bullish Meeting Lines, Three White Soldiers, Morning Star, Morning Star, Spinning Top, Dragonfly Doji, Gravestone Doji, Bullish Abandoned Baby, Marubozu etc.) Combining Japanese candlesticks with western technical analysis to get powerful results, Concept of Moving Average – SMA and EMA, Mathematical Indicators – MACD, RSI and other leading indicators used for technical analysis

**Unit – III** Fundamental Concepts, Fire wave patterns – Wave 1, dominant trend, Three wave pattern (corrective trend) – Wave A to C., Patent recognition and fractals, Elliot wave rules and guidelines, Fibonacci relationships, Fibonacci sequence, Golden Ratio, Golden Ratio, Fibonacci retracement, After Elliot, Rediscovery and current use, Criticism of Elliot Wave Theory

#### Unit - IV

Risk Management through Technical Analysis – Need, Techniques used for Risk Management, Day Trading, Advantages of Day Trading, Risk of Day Trading, The psychology of technical analysis – crowd behavior, bull bear cycle, the psychology of fear and success. Strategies for Day Trading End of the Day Trading, Intraday Trading, Momentum Trading, Speculation etc. Trading Strategies for Equity, Commodities, Currency Futures and Derivatives. Importance of discipline in Trading, Qualities and Skills required for being successful as a trader, some of the world's successful traders and techniques adopted by them.

**Note:** Students are expected to keep themselves updated with latest developments in the subject from financial dailies like The Economic Times, Financial Express etc., watch business channels e.g. CNBC, NDTV Profit, ET Now etc. and get updates from websites of SEBI, NSE etc. The patterns and indicators suggested in the syllabus are only indicative and this list is not exhaustive.

- 1. Poser, Steven W., Applying Elliott Wave Theory Profitably, John Wiley & Sons, Ltd.
- 2. Murphy, John J., Technical Analysis of the Financial Markets, New York Institute of Finance

#### **Sustainable Finance**

Course Code: PGDER-110 L - 3, Credits - 3

**Course Outcomes:** To integrate environmental social and governance criteria into the business and investment decisions for lasting benefit to the society at large.

#### Unit I:

Sustainable development, Financial aspects of sustainable development, Sustainable finance, Alternate approaches to finance, Cases in Sustainable finance, Sustainable financial decisions, their significance and contribution to economy.

### **Unit II:**

Sustainable investment, concept, meaning and process of sustainable investment, Sustainable Indices, Sustainable investment strategies, Impact Investment, Socially responsible investment, Responsible investment, Environment-Society-Governance framework, Costs and benefits of Sustainable investment, Alternative investments

### **Unit III:**

Green Bonds, Carbon Credits, Social investment bonds, Sustainable real estate, Venture capital with an impact, Green buildings, Renewable energy financing, Forestry, natural resources, and agriculture, Risk management through sustainable methods, Understanding behaviour of clients

### **Unit IV:**

Balancing between profit and purpose, Sustainability as business strategy, Social entrepreneurship, Microfinance, Crowdfunding, Private equity, Public equities, Hedge funds, Innovation for sustainable cause, Workforce and sustainable finance

- 1. Chesney, M., Gheyssens, J., & Taschini, L. Environmental Finance and Investments. Springer.
- 2. Krosinsky, C., & Purdom, S. *Sustainable Investing: Revolutions in theory and practice*. Routledge.
- 3. Schoenmaker, D., & Schramade, W. *Principles of Sustainable Finance*. Oxford University Press.
- 4. Weber, O., & Feltmate, B. Sustainable Banking: Managing the Social and Environmental Impact of Financial Institutions. University of Toronto Press.

#### **Behavioural Finance**

Course Code: PGDER-112 L – 3, Credits – 3

Course Outcomes: To understand the behavioral aspects of irrational market participants and their influence on the market.

#### Unit I

**Foundations of Behavioural Finance:** Definition, behavioural finance micro and behavioural finance macro, important contributors, components, difference with standard finance; Market efficiency and anomalies; Expected Utility Theory; Agency theory; Limits to Arbitrage; Prospect theory, basic framework; Loss Aversion, model of loss aversion; Gambler fallacy, hot hand fallacy.

### Unit II

**Investor Behaviour:** Types of investors, objectives of investment, factors influencing Investor decision making, factors influencing investor personality, characteristics of successful investors; Risk Attitude, types of risk, standard finance view of risk, behavioural finance viewpoint of risk, risk perception, factors affecting risk attitude; Investor Personality, tools, investor models, contrarian investor, examples, strategies.

### Unit III

**Behavioural Biases and Irrational Investing:** Heuristics and Biases, representativeness heuristic, availability heuristic, affect heuristic, similarity heuristic; Cognitive and Emotional Biases, overconfidence bias, cognitive dissonance bias, self attribution bias, illusion of control bias, conservatism bias, ambiguity aversion bias, endowment bias, self control bias, optimism bias, mental accounting bias, confirmation bias, hindsight bias, recency bias, regret aversion bias, status quo bias, Strategies to Overcome Biases; Over Reaction and Optimism; Herding Behaviour and Mean Reversal.

### **Unit IV**

**Recent Advances in Behavioural Finance:** Neuro Finance, human brain, brain secretions, neurotechnology; Noise Trading, Behavioural Capital Asset Pricing Model, Behavioural Portfolio Theory, investor sentiments; Conflict of Interest and Group Psychology on Board, contract theory, corporate governance, strategies, Case Studies

- 1. Monitor, J. *Behavioural Finance: Insights into Irrational Minds and Markets.* Oxford University.
- 2. Shefrin, H. Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing. Harvard Business School Press.
- 3. Thaler, R. H. Advances in Behavioral Finance. Russell Sage Foundation.
- 4. Tvede, L. *The Psychology of Finance: Understanding the Behavioural Dynamics of Markets.* Weily.

### **Investment Research Skills - II**

Course Code: PGDER-114 L – 3, Credits – 3

**Course Outcomes:** To develop advanced research skills for performing equity analysis and to give investment recommendations. The course will also help students evaluate and create an overall financial strategy.

### Unit I

Application of Financial Statements-Financial Ratios- DuPont Analysis: Interpretation and Analysis; Preparation of Forecasts, Calculation of Free cash Flows, Understanding Cash Conversion Cycle, Quantitative Analysis

### **Unit II**

Approaches to Valuation- Techniques of Valuation; Discounted Cash Flow Models- Free Cash Flow Model, Dividend Discount Model, Intrinsic Vs Market Value; Relative Valuation Approach- Comparable Company Analysis, Multiples Approach; Asset Based Valuation Models

### Unit III

Preparing Equity Research Reports- Reading and Analyzing Annual Reports-Components of Annual Reports- Director's Report, Management Discussion and Analysis, Financial Highlights, Report on Corporate Governance; Process Involved in Preparation of Equity Research Reports- Generating Investment Ideas, Understanding Sell- Side Reports, Explaining Research Findings- Developing Logic using Minto Pyramid Principle, Structuring of Report

### **Unit IV**

Investing and Stock Screening Process- Identification of Investment Strategy- Market Timing, Hedging, Company Health Check; Stock Screening Tools and Strategies, Stock Screening vs Independent Research; Investment strategies followed by Benjamin Graham, John Templeton, Philip Fisher, Peter Lynch, Warren Buffet, Rakesh Jhunjhunwala and other successful investors

- 1. Valentine, James. Best Practices for Equity Research Analysts: Essentials for Buy-Side and Sell-Side Analysts. McGraw Hill.
- 2. Graham, Banjamin, & Dodd David. Security Analysis. McGraw Hill.
- 3. Damodaran, Aswath. Damodaran on Valuation: Security Analysis for Investment and Corporate Finance. Wiley Finance
- 4. Koller, T., Copeland, Thomas E., Goedhart, M., & Wessels, D. *Valuation: Measuring and Managing the Value of Companies*. 4<sup>th</sup> Ed., John Wiley & Sons

### **Open Elective**

Course Code: PGDER-116 Credits – 3

The student can take any open elective worth three credits from any University School of Studies from the university.

### Project – II

Course Code: PGDER-118 Credits – 6

The students shall prepare a project report based on their research/internship and submit it to the school for evaluation purposes. A viva-voce examination shall be conducted.