ANNA UNIVERSITY: : CHENNAI - 25

FACULTY OF MANAGEMENT SCIENCES

Approved Special Electives for

M.S. / Ph.D. Degree Programs

(upto 22nd AC 26.07.2017)

ANNA UNIVERSITY :: CHENNAI – 600 025.

SPECIAL ELECTIVES FOR FACULTY OF MANAGEMENT SCIENCES

COURSE CODE	COURSE TITLE	L	T	P	C
FB 1911	Emotional Intelligence	3	0	0	3
FB 1912	Shipping Business Management	3	0	0	3
FB 1913	International economics	3	0	0	3
FB 1914	Multivariate Statistical Analysis	3	0	0	3
FB 1915	Behavioral Finance	3	0	0	3
FB 1916	Experimental Methods For Employee Performance	3	0	0	3
FN 9001	Fuzzy Logic Neural Network, Genetic Algorithm and its Applications in Management	3	0	0	3
FN 9002	Retail Banking	3	0	0	3
FN 9003	Corporate Social Responsibility	3	0	0	3
FN 9004	Higher Education Policy and Management	3	0	0	3
FN 9005	Intelligent Systems for Business Applications	3	0	0	3
FN 9006	Optimization Techniques for Management	3	0	0	3
FN 9007	Organizational Effectiveness and Performance Management	3	0	0	3
FN 9008	Development Initiatives and Human Development	3	0	0	3
FN 9009	Workplace Spirituality	3	0	0	3
FN 9010	Food Psychology	3	0	0	3
FN 9011	Financial Econometrics	3	0	0	3
FN 9012	Corporate Frauds & Risk Management	3	0	0	3

FB 1911 EMOTIONAL INTELLIGENCE 3 0 0 3

OBJECTIVES:

This course explores basic concepts of emotional intelligence and the application of emotional intelligence to learning, the work place, and personal psychological adjustment. This course provides students with some of the theories, skills, and tools needed to identify the role of emotions in managerial function and organizational life.

UNIT I INTRODUCTION TO EMOTIONAL INTELLIGENCE 9

Meaning of Emotions, Emotional Intelligence- Importance- Models of Emotional Intelligence- Social Intelligence- IQ and EQ- Self Awareness- Social Skills – Relationship Management- EI and Motivation

UNIT II UNDERSTANDING EMOTIONS 9

The Brain and Emotion - The Relationship of Mood and Emotion - The Role of Emotion in Organizational Health and the Bottom Line - Types of Emotions- Control of Emotions Gender Differences in Emotion - Impulse Control- Marshmallow Experiment- Negative and Positive Emotions – Emotion and Health

UNIT III MANAGING EMOTIONS 9

Learning EI – Emotional Self Awareness – EI Assessment Tools - Emotional Intelligence and Psychological Adjustment - Issues in Anxiety, Stress, Depression, Anger, Self Esteem and Self Management Empathy

UNIT IV EI PRACTICE IN ORGANIZATIONS 9

Emotional Intelligence and Decision Making - EI and Personality- Work Frustrations- EI and Work Performance- EI and Leadership - EI and Job Stress – EI and Information Processing - EI and Communication – Goal Conflict – EI and Conflict Resolution – EI and Work Place Diversity – Group EI – Star Performers

UNIT V EMOTIONAL COMPETENCE 10

Developing EI in Organization – Transformation and Change – Training, Transfer, Maintenance and Evaluating Change - Emotional Quality Management

TOTAL: 45 PERIODS

REFERENCES:

1. Ciarruchi, J., Forgas, J. and Mayer, John. (2001) Emotional Intelligence in Everyday Life: A Scientific Inquiry. Psychology Press: Philadelphia, PA.
2. Daliph Singh (2001) Emotional Intelligence At Work: A Professional Guide. Response Books: New Delhi
3. Daniel Goleman , (1996) Emotonal Intelligence: Why It can Matter More Than IQ. Bantam Books: NewYork.
4. Doty, G. (2001). Fostering Emotional Intelligence in K-8 Students. Corwin Press: Thousand Oaks, CA.
5. Oatley, K and Jenkins, J (2000) Understanding Emotions. Malden MA: Blackwell

FB 1912 SHIPPING BUSINESS MANAGEMENT 3 0 0 3

UNIT I INTRODUCTION 9

Total and Patterns of trade- Shipping Business-Definition. Demand for Shipping: Demand for sea transport-Factors influencing the demand for shipping services, Competition from within the industry and from other modes of transport modes, Quality assurance systems.

UNIT II SHIPPING BUSINESS SECTORS-CHARTERING 9

Dry Cargo Chartering: Role of the broker; Relationship with Ship Owners and Charterers, the market and its operation.
Tanker Chartering: Distinctive features of the market, Brokers ,Owners and Charterers, Use of world Scale.

UNIT III SHIPPING BUSINESS SECTORS-OPERATIONS AND MANAGEMENT 9

Ship Operation and Management: The need for Ship Managers, In-House or Independent-Services offered-including total, commercial, technical Management, Crewing Agencies.
Port Agency: Tramp and Tanker Agents-Scope of work, Relationship with Ship owner and Charterer, Supervisory / Protecting Agents.
Liner Agency: In-House or Independent, Types of Appointment, Range of responsibilities, Relationship with Liner Operators, Exporters, Shippers, Forwarders, NVOCC'S.

UNIT IV CONTAINERISATION, INTERMODAL TRANSPORT AND LOGISTICS 9

The Concept of unitization and intermodalism. Container Types and Terminology, Non-Port Depots, Inland Haulage; Carrier/Merchant Haulage, Feeder Services, Container Management-Owning/Leasing, Repairs and Interchange.
Freight Forwarders and Non-Vessel Operating Carriers, Agency role and Carrier Role, Multi Modal Transport, Logistics and Supply Chain Management.

UNIT V SHIPPING ORGANISATIONS – ROLE AND CONTRIBUTIONS. 9

Ship Owner Organisations: INTERCARGO, INTERTANKO, Baltic and International Maritime Council(BIMCO),International Chamber of Shipping, National Owners association.
Brokers and Agents Organisation: Institute of Chartered Ship Brokers, The Baltic Exchange, Federation of National association of Ship Brokers and Agents(FONASBA), International federation of forwarding agents association(FIATA), Case Studies.

TOTAL: 45 PERIODS

REFERENCES:

1. Malcolm Willingale, Ship Management, Lloyd's of London Press, London, 1995.
2. Gorton, Ihre, Sandevarn, Ship Broking and Chartering Practice, Lloyd's of London Press, 1995.
3. Christopher Hill, Maritime Law, Lloyd's of London Press, London, 1995.
4. Stop Ford Martin, Maritime Economics, Routledge, London, 1995.
5. Branch Alan E, Elements of Shipping, Chapman Hall, London, 1993.

FB 1913 INTERNATIONAL ECONOMICS 3 0 0 3

UNIT I INTRODUCTION 9

Importance of Industrial Economics – The subject matter of International Economics – Current international economic problems – International trade theories – Classical and contemporary models, International trade and economic growth .International trade policy – Partial and general equilibrium analysis of trade policy.

UNIT II BALANCE OF PAYMENTS AND EXCHANGE RATES 9

Balance of payments – International transactions – Current and capital accounts – Disequilibrium in international transactions. Foreign exchange markets – Foreign exchange rates – Purchasing – power parity theory – balance of payments and exchange rates – Asset-markets model and exchange rates – Exchange rate dynamics and exchange rate forecasting.

UNIT III MACROECONOMICS AND THE INTERNATIONAL MONETRY SYSTEMS 9

Income determination in a closed and an open economy – Equilibrium in the goods markets ,in the money market and in the balance of payments – The IS – LM –BP model with flexible exchange rates – The international Monetary system – The Bretton Woods Systems - Collapse of the Bretton Woods System – the Role of IMF – problems with present exchange rate arrangements.

UNIT IV INTERNATIONAL TRADE AND ECONOMIC DEVELOPMENT 9

Trade theory and economic development – Terms of trade and economic development – Export instability and economic development – Economic integration and development – Import substitution Versus Export – Orientation – Economic performance of nations and their trade orientations – Recent trade liberalizations and economic growth – International experiences – Case studies.

UNIT V INTERNATIONAL TRADE RELATIONS 9

Trade and development issues – Developed and developing nations perspectives – Barriers to trade – International and Regional trade organizations –Trade problems of developing nations - The role of WTO – Indian trade reforms – Trade performance – Composition of Trade – Trade policy of India.

TOTAL: 45 PERIODS

REFERENCES:

1. BO Sodersten and Geoffreg Reed , International Economics ,Macmillan ,London 1998.
2. Wilfred J.Etheir , Modern International Economics .W.W. Norton & Company ,London 1995.
3. Peter B. Kenen , The International Economy ,Prentice - Hall of India Private Ltd., New Delhi 2003.
4. Dominick Salvatore , International Economics ,John Wiley and Sons ,Singapore 2001.

FB 1914 MULTIVARIATE STATISTICAL ANALYSIS 3 0 0 3

UNIT I INTRODUCTION 6

Introduction – Basic concepts – Uni-variate, Bi-variate and Multi-variate techniques – Types of multivariate techniques – Classification of multivariate techniques – Guidelines for multivariate analysis and interpretation – Approaches to multivariate model building.

UNIT II PREPARING FOR MULTIVARIATE ANALYSIS 6

Introduction – Conceptualization of research problem – Identification of technique – Examination of variables and data – Measurement of variables and collection of data – Measurement of errors – Statistical significance of errors, Missing data – Approaches for dealing with missing data – Testing the assumptions of multivariate analysis – Incorporating non-metric data with dummy variables.

UNIT III MULTIPLE LINEAR REGRESSION ANALYSIS, FACTOR ANALYSIS, AND CANONICAL CORRELATION ANALYSIS 12

Multiple Linear Regression Analysis – Introduction – Basic concepts – Multiple linear regression model – Least square estimation – Inferences from the estimated regression function – Validation of the model.Factor Analysis: Definition – Objectives – Approaches to factor analysis – Methods of estimation – Factor rotation – Factor scores Sum of variance explained – interpretation of resuCanonical Correlation AnaObjectives Canonical variates and anonical correlation – Interpretation of variates and correlations.

UNIT IV MULTIPLE DISCRIMINANT ANALYSIS, CLUSTER ANALYSIS AND CONJOINT ANALYSIS 12

Multiple Discriminant Analysis – Basic concepts – Separation and Classification of two populations – Evaluating classification functions – Validation of the model.luster Analysis – Definitions – Objectives – Similarity of measures –Hierarchical and Non-hierarchical clustering methods – Interpretation and validation of the model.Conjoint Analysis – Definitions – Basic concepts - Attributes – Preferences –Ranking of Preferences – Output of Conjoint measurements – Utility – Interpretation.

UNIT V MULTI DIMENSIONAL SCALING AND ADVANCED TECHNIQUES 9

Multi Dimensional Scaling – Definitions – Objectives – Basic concepts – Scaling techniques – Attribute and Non-Attributes based MDS Techniques – Interpretation and Validation of models.Advanced Techniques – Structural Equation modeling – Basic concepts – Stages in SEM – Application of SEM in business research.

TOTAL: 45 PERIODS

REFERENCES:

1. Joseph F Hair, Rolph E Anderson, Ronald L. Tatham & William C. Black, Multivariate Data Analysis, Pearson Education, New Delhi, 2005.
2. Richard A. Johnson and Dean W. Wichern, Applied Multivariate Statistical Analysis, Prentice Hall of India Pvt. Ltd., New Delhi, 2005.
3. David R. Anderson, Dennis J Seveency and Thomas A. Williams – Statistics for Business and Economics, Thompson, Singapore, 2002.

FB 1915 BEHAVIOURAL FINANCE 3 0 0 3

UNIT I INTRODUCTION 5

Investment Decision - Investment Process – Investor Behaviour – Noise trader risk in financial market.

UNIT II EFFICIENCY AND INEFFICIENCY OF CAPITAL MARKETS 9

Stock price movement Professional arbitrage – Model of investor sentiment – Stock market rationality and irrationality – fundamental analysis-Heuristic-driven-bias-Frame dependence-Inefficient markets.

UNIT III PERSONALITY AND INVESTOR BEHAVIOUR 9

Stock price Forecasting – Stock picks to beat the market-Gender personality type and investor behaviour-Investor personality types – Greed and Fear – Neuroeconomics and investor behaviour.

UNIT IV INVESTOR BIASES AND INVESTMENT DECISIONS 12

Overconfidence bias-Representatives bias – Anchoring and adjustment bias-cognitive dissonance bias-availability bias-Self-Attribution bias-Illusion of control bias-Conservation bias-Ambiguity aversion bias-Endowment bias-Self control bias-optimism bias-mental accounting bias-Confirmation bias-Hindsight bias-Loss aversion bias-Regret aversion bias-Framing bias-Status quo bias.

UNIT V BEHAVIOURAL FINANCE AND WEALTH MANAGEMENTB 9

Analyst's Optimism and pessimism – Prediction and earnings – Stock recommendations – Options and Futures – Optimal portfolio – Case studies.

TOTAL: 45 PERIODS

REFERENCES:

1. Michael M Pompian, Behavioral Finance and Wealth management: How to build optimal portfolios that account for investor biases, John Wiley, and Son New Jersey, 2002.
2. Hersh Shefrin, Beyond Greed and Fear: Understanding Behavioral Finance and the psychology of investing, Oxford University Press, New York, 2002.
3. Richard H Thaler, Advances in Behavioral Finance, Russell Sage Foundation, New York, 2006.
4. Andrei Shleifer, Inefficient Markets: An introduction to behavioral Finance, Oxford University Press, New York, Reprint 2003.
5. Arnold S. Wood, Amos Tversky, Werner F M De Bondt and Meir Stateman, Behavioral Finance & Decision Theory in Investment Management, AIMR (CFA Institute), New York, 1995.

FB 1916 EXPERIMENTAL METHODS FOR EMPLOYEE PERFORMANCE 3 0 0 3

UNIT I **12**

Performance Measurement – Concepts – Appraisal System Design and Implementation – Experiment – Concepts – Purpose – Types – Conducting Experiments Reporting.

UNIT II **6**

One Group Designs – Pretest – Posttest Design – Interrupted Time Series –Correlations Design.

UNIT III **9**

Multiple Group Design – Two Groups Design – Multiple Group Post-test Design – Multiple Group Pre-test – Post-test Design – Expost Facto Design – Multiple Group Time Series Design.

UNIT IV **12**

Factorial Designs – Two x Two factorial Design – Solomon Four Group Design – mxn Factorial design – Higher Order Factorial Design – Hierarchical Design – Design with a concomitant variable – Multivariate Design.

UNIT V **6**

Randomization – Complete Randomization – Repeated Measures Design – Mixed Design – Randomized Block Design – Latin Square Design.

TOTAL: 45 PERIODS

REFERENCES:

1. Michael S. Lewis- Beck (Editor), "Experimental Design and Methods", Sage Publication India Pvt. Ltd., New Delhi. 1993.
2. David G. Elmes, Barry H. Kentowitz and Hendry L. Roediger III, Research Methods in Psycholog, West Publishing Company, St' Paul. 1995.
3. Ronald R. Cooper, Pamela S. Schinder, 'Business Research Methods', Tata McGraw-Hill Publishing Co. Ltd. New Delhi. 2006.
4. Prem Chandra, 'Performance Management', Macmillian India Ltd., Chennai, 2003.

FN 9001 FUZZY LOGIC, NEURAL NETWORK, GENETIC ALGORITHM AND ITS APPLICATIONS IN MANAGEMENT 3 0 0 3

UNIT I ARTIFICIAL INTELLIGENCE

Introduction - Intelligent Agents – Problem-solving – Solving problems by searching – Informed search methods – Game Playing - Acting Logically – Planning – Practical Planning – Learning – Reinforcement Learning

UNIT II FUZZY LOGIC AND FUZZY SETS

Fuzzy Sets – Operations on Fuzzy Sets – Fuzzy Relations - Fuzzy Rules and Fuzzy Reasoning – Fuzzy Inference Systems – Fuzzy Logic – Fuzzy Expert Systems – Fuzzy Decision Making

UNIT III NEURAL NETWORK

Neural networks - Basic models of artificial neural networks: simple layer perception - Feed forward multilayer perceptron - Applications of neural networks - Adaptive filtering and adaptive pattern recognition

UNIT IV GENETIC ALGORITHM

Simple genetic algorithm – Mathematical foundations –Data structures – Reproduction – Cross over and mutation – Schema theorem and convergence of genetic algorithm

UNIT V HYBRID SYSTEMS

Neural-network-based fuzzy systems – Fuzzy logic based neural networks – Genetic algorithm for neural network design and learning – Fuzzy logic and genetic algorithm for optimization – Applications.

TOTAL: 45 PERIODS

REFERENCES:

1. Stuart Russell, Peter Norvig, “Artificial Intelligence – A Modern Approach”, Second Edition, Pearson Education, 2004.
2. Chin-Teng Lin & C.S. George Lee, “Neural Fuzzy Systems”, Prentice Hall PTR.
3. Klir & Yuan, “Fuzzy Sets and Fuzzy Logic”, PHI, 1997.
4. S.Haykin, “Neural Networks”, Pearson Education, Second Edition, 2001.
5. S.Rajasekaran & G.A.V. Pai, “Neural Networks, Fuzzy logic and Genetic Algorithms”, PHI.
6. Jang, Sun & Mizutani, “Neuro-Fuzzy and Soft Computing”, PHI.
7. V.Kecman, “Learning and Soft Computing”, MIT Press, 2001.
8. D.Ruan, “Intelligent Hybrid Systems”, Kluwer Academic Publisher, 1997.

FN 9002 RETAIL BANKING L T P C
3 0 0 3

UNIT I PRINCIPLES OF BANKING 8

Structure and Functions of Banking - Indian Banking: Recent Trends. Commercial Banking Industry - International Banking – Retail and wholesale banking-Banker-Customer Relationship- New Age Banking and Special Services Rendered by Banks to Customers.

UNIT II EVOLUTION AND CHALLENGES OF RETAIL BANKING 8

Definition and Meaning of Retail Banking - Evolution of Retail Banking - Need for Retail Banking - Present Scenario of Retail Banking - Strategies for Increasing Retail Banking Business - Innovation in Costumer Service in Banks – Challenges of Retail Banking

UNIT III RETAIL BANKING PRODUCTS 9

Retail Banking Products - Categorization of Retail Bank Services - Emerging Trends in Retail Bank Services – Bank Service to Common Man - Retail Banking: A Customer Centric Process.

UNIT IV MARKETING & BANKING SERVICES 10

Introduction to Marketing & Its Importance to Product Planning - Banking Marketing Mix: Product, Price, Place, Promotion - Marketing Information System - Market Segmentation - Marketing Strategy - Costumer Segmentation - Changing Customer Profile

UNIT V BANK PERSONNEL MANAGEMENT 10

Fundamentals of human resource management - Structure and functions - Role of the HRD professional – Recruitment, Selection, Training and development of human resources, Compensation, Separation-Performance appraisal

TOTAL: 45 PERIODS

REFERENCES:

1. A.M. Arondekar, O.P Agarwal, Dr. Onkar Nath, P.S. Khandelwal; Principles of Banking, Macmillan India Ltd., Indian Institute of Banking & Finance, New Delhi, 2003.
2. Vasanth V. Joshi, Vinay V. Joshi; 'Managing Indian Banks: The Challenges Ahead'; 2nd Edition, Response Books, New Delhi, 1998
3. Mohan Prasad Shrivastava, Pradeep Kumar Pandey, V. P. Vidyarthy; Banking Reforms and Globalization; Global Media Publications, New Delhi, 2005
4. Katuri Nageswara Rao, ICFAI University, Banking Series, Hyderabad, 2002
5. Katuri Nageswara Rao; Innovations in Banks; ICFAI University Press, Hyderabad, 2005

FN 9003 CORPORATE SOCIAL RESPONSIBILITY L T P C
3 0 0 3

UNIT I INTRODUCTION 6

Introduction to CSR –Need and scope – Corporate social initiatives– external and internal forces in CSR - Social and Cultural impacts –Stakeholder theory – Dilemmas

UNIT II CORPORATE SUSTAINABILITY 9

Corporate sustainability (CS) – human & ecological approaches – Drivers of corporate sustainability - competitive advantage & Corporate Social Responsibility – challenges in building sustainable corporations - Business cases.

UNIT III PHASES OF CORPORATE SUSTAINABILITY 9

Monitoring and assessment of corporate sustainability – sustainability models – implementation of sustainable initiatives - compliance – strategic opportunities - incremental, radical and transformational changes.

UNIT IV LEADING CORPORATE SOCIAL RESPONSIBILITY 9

Role of corporate leaders and change agents – effect of change on key stakeholders – CSR & CS audits – leading CSR & CS.

UNIT V FROM THEORY TO PRACTICE 12

Historical and theoretical perspectives of CSR Economic and Political economy of CSR– measuring CSR – CSR and Investor Perspectives – Aligning with interest of other stakeholders -Corporate Citizenship - Human Rights issues - Cases in CSR and CS.

TOTAL: 45 PERIODS

REFERENCES:

1. Kotler Philip and Lee Nancy, Corporate Social Responsibility: doing the most good for your company and your cause – Wiley India – Reprint 2008.
2. Werther William and Chandler David, Strategic Corporate Social Responsibility: stakeholders in a Global environment Sage publications – 2006.
3. Banerjee Subratta ,Corporate Social Responsibility, Edward Elgar Publishing Limited 2007.
4. Gowther David and Lez Rayman Bucchus, Perspectives on Corporate Social Responsibility: Ash gate publishing 2005.
5. Hancock John, Investing in CSR : A guide to best practice, Kogan page 2005.
6. Kotler Philip, Roberto Ned and Lee Nancy, Social Marketing: Improving quality of life, Sage publication 2005.
7. Steve May, George Cheney and Juliet Roper, Debate over CSR, Oxford University Press, 2007.

FN 9004 HIGHER EDUCATION POLICY AND MANAGEMENT L T P C
3 0 0 3

UNIT I INTRODUCTION 9

Introduction to education management ,Organizational levels of education: primary, secondary, higher education, its growth and development, problems and challenges, social relevance, Comparison of Indian education system with the other countries' educational system (like Japan, U.S.A., U.K.), International Baccalaureate Diploma program , Theories and models of educational leadership.

UNIT II EDUCATION POLICY IN INDIA 9

Historical and political development of Education policy, interplay with socio-cultural and political factors, Educational Legislation, policy analysis , control in educational system – internal and external agencies, Educational reforms

UNIT III EDUCATION MANAGEMENT 9

Funding of the educational institutions: Sources of finance for educational institutions, internal generation as a source of finance, Environmental Scanning and marketing opportunity analysis , Marketing information system : marketing research, marketing planning, Promotion decision : communication process; promotion strategies relation to education

UNIT IV CURRICULUM MANAGEMENT AND PLANNED CHANGE 9

Curriculum planning & designing for formal / informal education, Curriculum and assessment theories and models, Need for review and revision of curriculum, Strategies for teaching /learning, Curriculum Organization: Curriculum Mapping & Alignment and Curriculum Implementation, Curriculum Accountability and Evaluation

UNIT V EMERGING ISSUES RELATED TO EDUCATION MANAGEMENT 9

Privatization of educational institutions (its importance and problems), Role of UGC, AICTE in technical and non – technical education system, Ethical and spiritual issues in education management, Foreign Educational Institutions (Regulation of Entry and Operation) Bill, 2010, Issues of diversity in educational organizations, including issues related to biculturalism, gender and multiculturalism

TOTAL: 45 PERIODS

TEXT BOOK :

1. Tony Bush, Theories of educational Leadership and Management 3rd Edition, Sage Publications Ltd, 2003

REFERENCES:

1. Charles Wankel, Bob DeFillippi, New Visions of graduate management education, Information Age Publishing Inc, 2006
2. Amrik Singh, Fifty years of Higher Education in India: The role of the University Grants Commission, Sage Publications Ltd, 2004
3. Tim Pound, The international baccalaureate diploma program: An introduction to teachers and managers, Routledge, 2006.

FN 9005 INTELLIGENT SYSTEMS FOR BUSINESS APPLICATIONS L T P C
3 0 0 3

UNIT I INTRODUCTION 9

History and Applications of Artificial Intelligence – Algorithmic versus Heuristic reasoning, Representation and Intelligence. Knowledge Representation: Rule based, Model based, Case based and hybrid systems. Logic based Abductive Inference, Stochastic approach to uncertainty, Decision Making and DSS in business using Intelligent System.

UNIT II GENETIC ALGORITHMS 9

Introduction to Genetic Algorithms (GA) : Reproduction, Cross over, Mutation - Applications and software –– Intelligent Agents – Multiple Agents and Data Mining – Distributed Artificial Intelligence - An Evolutionary Programming based Knowledge Ensemble Model for Business Risk Identification.

UNIT III NEURAL NETWORKS 9

Machine Learning Using Neural Network, Adaptive Networks – Feed forward Networks – Supervised Learning Neural Networks – Radial Basis Function Networks - Reinforcement Learning – Unsupervised Learning Neural Networks – Adaptive Resonance architectures – Advances in Neural networks - CBR Based Engine for Business Internal Control- An EMD-based Neural Network Ensemble Learning Model for World Crude Oil Spot Price Forecasting.

UNIT IV FUZZY LOGIC 9

Crisp set versus Fuzzy Sets – Operations on Fuzzy Sets –Fuzzy Arithmetic - Fuzzy Relations – Membership Functions- Fuzzy Rules and Fuzzy Reasoning – Fuzzy Inference Systems – Fuzzy Expert Systems – Fuzzy Decision Making - A fuzzy Clustering Analysis for Target Group Identification.

UNIT V HYBRID SYSTEMS 9

Adaptive Neuro-Fuzzy Inference Systems - Hybrid intelligence systems – Opportunistic Scheduling and Pricing Strategies for Automated Contracting in Supply Chains - AHP – SEM – DEA – Business

TOTAL = 45 PERIODS

TEXT BOOKS:

1. Jyh-Shing Roger Jang, Chuen-Tsai Sun, Eiji Mizutani, “Neuro-Fuzzy and Soft Computing”, Prentice-Hall of India, 2003.
2. George J. Klir and Bo Yuan, “Fuzzy Sets and Fuzzy Logic-Theory and Applications”, Prentice Hall, 1995.
3. James A. Freeman and David M. Skapura, “Neural Networks Algorithms, Applications, and Programming Techniques”, Pearson Edn., 2003.

REFERENCES:

1. Mitchell Melanie, “An Introduction to Genetic Algorithm”, Prentice Hall, 1998.
2. David E. Goldberg, “Genetic Algorithms in Search, Optimization and Machine Learning”, Addison Wesley, 1997.
3. Jacek M. Zurada, “Introduction to Artificial Neural Systems”, PWS Publishers, 1992.
4. Prasad, Bhanu (Ed.), Soft Computing Applications in Business Series: Studies in Fuzziness and Soft Computing, Vol. 230, 2008.
5. Aliev, Rafik Aziz, Fazlollahi, Bijan, Aliev, Rashad Rafik, Soft Computing and its Applications in Business and EconomicsSeries: Studies in Fuzziness and Soft Computing, Vol. 157, 2004.

FN 9006 OPTIMIZATION TECHINQUES FOR MANAGEMENT L T P C
3 0 0 3

UNIT I CONCEPTS IN DECISION MAKING 9

Individual View of Decision Making – Group View of Decision Making- Social View of Decision Making- Planning and Policy Decisions – Planning for a specific project – Evaluating Risks – Resource Allocation – Operating Decisions.

UNIT II BUSINESS STRATEGY MODELING 9

Overview of Business Strategy Models - Elements of a Business Strategy Model - Discovery of Organization's Intentions and Values - Specifying Means - Assessing the Environment - Why Business Case - Desirability Analysis - Business Case Framework - Business Case Management

UNIT III OPTIMIZATION 9

Minimum Cost Analysis- Simulation – Optimality Conditions – Univariate Optimization – Multivariate Optimization – Two variable Optimization Problem – Lagrange Multipliers - Subsets in Optimization – Probabilistic models.

UNIT IV OPTIMIZATION PROGRAMMING 9

Linear Programming - Dynamic Programming - Geomentric Programming – Univariable search methods – Multivariable Functions – Method of Steepest Ascent – Constrained Optimization – Subgradient Optimization – Summation of series.

UNIT V ADVANCED NETWORK OPTIMIZATION 9

Network optimization Models- The shortest path Problem- the maximum flow problem- the minimum cost flow problem - The Project Management with PERT/CPM - Agile process model – Agile development and principles – Agile four phases - Responsive agile methodology – Agile process method and project management

TOTAL:45 PERIODS

TEXT BOOKS

1. Engineering Optimization: Methods And Applications By A. Ravindran, K. M. Ragsdell, G. V. Reklaitis, John Wiley India, 2006.
2. Decision models for management, Jack Byrd, L. Ted Moore, McGraw-Hill, 1982
3. Understanding Business Strategy: Concepts and Cases, By R. Duane Ireland, Robert E. Hoskisson, Michael A. Hitt, south-western cengage learning, 2009,2007
4. Hiller and Lieberman, Introduction to Operation Research (Seventh Edition) Tata McGrawHill Publishing Company Ltd
5. Agile manufacturing: the 21st century competitive strategy, A. Gunasekaran, Elsevier, 2001.

REFERENCES

1. Cost and Optimization Engineering by Frederic C. Jelen and James H. Black, (Editors), Second Edition, McGraw-Hill Book Company.
2. Business strategy: an introduction, David Campbell, George Stonehouse, Bill Houston, Second Edition, Elsevier.
3. Ravindren Philips and Solberg, Operation Research Principles and Practice(Second Edition) John Wiley & Sons.

FN 9007 ORGANIZATIONAL EFFECTIVENESS AND PERFORMANCE MANAGEMENT **L T P C 3 0 0 3**

UNIT I ORGANIZATIONAL BEHAVIOR 8

Introduction to OB - Attitude, Value, Behavior - OB models – Individual and Group Behavior and Performance– Leadership Styles – Organizational Culture - Factors affecting Organizational Climate – Job Description – Job Satisfaction – Motivational Theories – Decision Making.

UNIT II PERFORMANCE PLANNING AND MONITORING 9

Vision, Mission - Setting Goals for organization, teams and individuals – Building High Performing Teams – Role Clarity – Accountability - Development Plans – Mapping individual, team and organization goals – Setting Performance Criteria - Designing Performance Management Systems – Training and Communication- Monitoring Processes – Mentoring - Continuous Feedback - 360 degree Feedback – Periodic Reviews – Delivering Efficient Feedback.

UNIT III MEASUREMENT OF PERFORMANCE 10

Power of Measurement – Context of Measurement – Types of Measurement – Performance Appraisal Systems- Methods and Types of Appraisal – KPA, KRA, KPI- Appraisal System Design – Recognition and Rewards – Appraisal Systems in Higher Education- Measurement of Technology – Transformational Measures – Performance Measurement Maturity – Learning from Measurements –Balanced Score Card as a Measurement Tool – Development of Metrics.

UNIT IV PERFORMANCE MANAGEMENT SYSTEM 9

Evolution of Performance Management Practices – Performance Management Cycle – Risks and Benefits – Different Models of PMS – Management of Performance of Systems, Operations and Human - PM in Education Institutions – Performance Improvement Plans - Financial Performance – Understanding Balance Sheet and Profit and Loss Account – Financial Growth Analysis – Key Management Ratios – Application in Higher Education.

UNIT V ORGANIZATIONAL EFFECTIVENESS 9

Organizational Design – Dynamics of an organization - Organizational Evolution and Sustenance – Organizational Life Cycle - Models of Transformation– Organizational Learning- Creation of Value -Efficiency, Effectiveness, Productivity in Organizations– Role of leadership in organizational effectiveness- Measuring Organizational Effectiveness - Change through PMS especially in Higher Education Institutions.

TOTAL : 45 PERIODS

TEXT BOOKS:

1. Stephen P. Robins, Organisational Behavior, PHI Learning / Pearson Education, 13th edition, 2010.
2. Michael Armstrong & Angela Baron, Performance Management: The New Realities, Jaico Publishing House, New Delhi, 2002.

REFERENCES:

1.Dean R. Spitzer, Transforming Performance Measurement, Publ: American Management Association. NY – 2007.
2. Ciaran Walsh, Key Management Ratios, Publ: Prentice Hall, UK – 2008.
3. T.V.Rao, Performance management and appraisal systems, 2004
4. Prem Chadha: Performance Management, Macmillan India, New Delhi, 2003.
5. Amrik Singh, Fifty years of Higher Education in India: The role of the University Grants Commission, Sage Publications Ltd, 2004.

FN 9008 DEVELOPMENT INITIATIVES AND HUMAN DEVELOPMENT L T P C
3 0 0 3

OBJECTIVES:

- To be acquainted with the concept of Human Development, its origin, implementation, development, relevance and importance in today's world.
- To understand the fundamental constructs, development needs, issues and crucial areas of impact on human well-being.
- To be knowledgeable about ways and means of planning, financing, executing and accomplishing such development and the role of governments and international agencies.
- To ascertain the Human Development initiatives and progress with special reference to India.

UNIT I CONCEPT & MEASUREMENT 5

The Human Development Approach- Definition-United Nations Development Programme-Measures of Human development- Human development Index- Associated indices-Economic Growth & Human Development – Millennium Development Goals

UNIT II HUMAN DEVELOPMENT MANAGEMENT 11

Human Development Reports – Global Dimensions –People's Participation – Human Security – Gender and Human Development – HD to Eradicate Poverty – Consumption – Globalization – Human Rights –Technology – Deepening Democracy – Cultural Liberty

UNIT III ISSUES IN HUMAN DEVELOPMENT 11

International Co-operation – Power & Poverty – Water Crisis- Climate Change – Human Mobility – Sustainability & Equity – Reducing Vulnerabilities – Corruption – Population & Development – Political stability – Distribution & Disparity

UNIT IV FINANCING HUMAN DEVELOPMENT 9

Role of Central Government- National Budgets – Planning for Human Development – Role of State - International Assistance – UN Contributions – Gender Budgeting

UNIT V HUMAN DEVELOPMENT IN INDIA 9

Human Development Progress – Planning to Strengthen Human development - Financing for HD in India - Social Sector Programmes of the Government – Poverty Alleviation-Health –Education – livelihood – UNDP India

TOTAL : 45 PERIODS

OUTCOMES:

At the end of this course, the student will be able to:

- Define human development and measure its status using various indices and identify more variables for creating newer indices.
- Evaluate performances and scrutinize policies based on understanding of fundamental constructs.
- Identify impediments and comprehend its impact, and ways to counter them.
- Analyze budgetary allocations and propose changes to prioritize human development.
- Detect the actual status of India and explore the causes.

TEXT BOOKS :

1. UL Haq, Mahbub , "Readings in Human Development", edited by Sakiko Fukuda-Parr and A. K. Shiva Kumar Oxford, UK: Oxford University Press.2003
2. Gaurav Datt & Ashwani Mahajan, "Indian Economy", 69th Edition, S. Chand & Company Pvt Ltd.,2014

REFERENCES :

1. United Nations Development Programme, "Human Development Reports", Oxford, New York, Oxford University Press , 1990-2014
2. Planning Commission of India, "Trainers Manual of District Planning and Human Development", June 2008
3. Institute of Human Development, "Human Development In India: Emerging Issues And Policy Perspectives", February , 2010, New Delhi

JOURNALS:

1. Journal of Human Development & Capabilities
2. World Development- Journal

FN 9009 WORKPLACE SPIRITUALITY L T P C
3 0 0 3

OBJECTIVES

This course explores basic concepts of Workplace spirituality and the application of Workplace spirituality in the work place, and personal psychological adjustment. This course provides students with some of the theories, skills, and tools needed to identify the role of spiritual value systems in managerial function and organizational life.

UNIT I FRAMEWORK OF WORKPLACE SPIRITUALITY 8

Definition –spirituality concepts - religion v/s spirituality – influence of Hinduism, Christianity, Islam, Buddhism, etc., on work – models of spirituality

UNIT II APPLICATION OF SPIRITUALITY IN THE WORKPLACE 9

Four levels of spiritual evolution - individual – group – organisational – societal – Spiritual transformation

UNIT III INTEGRATION OF SPIRITUALITY WITH CAREER 10

Career, vocation and calling – career decisions - career drivers - career progression – career development

UNIT IV LEADERSHIP AND SPIRITUALITY 9

Leadership models – transactional – transformational – servant leadership – spiritual leadership models – leadership and performance – approaches to creating spiritual organisations

UNIT V CONTEMPORARY ISSUES IN SPIRITUALITY 9

Ethics and values – Eastern and Western perspectives – Multiculturism - Spiritual intelligence – spiritual capital – spiritual audit.

TOTAL : 45 PERIODS

OUTCOME :

Learning Workplace spirituality critically analyses spirituality as a managerial function and its impact in the workplace. It helps students to understand the core ethics and value systems pertaining to organisations.

REFERENCES:

1. Joan Marques, Satinder Dhiman, Richard King, Spirituality in the workplace: What it is, why it matter, how to make it work for you, Personhood press publications, Fawnskin CA, 2007.
2. William A Guillory, The living organisation- Spirituality in the workplace, , Innovations international Inc., Utah USA, 1st edition 2000.
3. Robert A. Giacalone and Carole L. Jurkiewicz, Handbook of workplace spirituality and organisational performance, M.E Sharpe publishers, 2nd edition 2010.
4. Nancy R. Smith, A complete guide on Workplace spirituality , Axial age publishing, 2005.
5. Margaret Benefial, Soul at work, spiritual leadership in organisation, Seabury books, New York, 2005

FN 9010	**FOOD PSYCHOLOGY**	**L T P C**
		3 0 0 3

COURSE OBJECTIVES:

- To explain local, national, or global trends or ideologies regarding food systems and their impact on food production, distribution, consumption and buyer behaviour
- To identify the ways social and cultural food practices influence social identity
- To assess the ways food preferences and choices impact health

UNIT I INTRODUCTION TO FOOD PSYCHOLOGY 9

Introduction- Theoretical Models of Food Choice-Importance of Models - The Furst model of food choice- The influence of factors such as Life course – Influences- Personal Systems- Value Negotiations – Strategies- Models in Health- Theory of Planned Behaviour- Health Belief Model- Market Segments- The effect of values on consumer behaviour

UNIT II INTERNAL FACTORS OF TASTE AND FOOD REGULATION 9

Development of taste preferences- Taste physiology- Taste sensitivity- Changes with age- Development of sweet taste- Food intake regulation- Nutrient effects on intake and behaviour- Sensory- Specific Satiety

UNIT III FOOD CHOICES & EATING HABITS 9

Liking and wanting are different- When do taste preferences start- Life Style Matrices- Preference for various tastes- Eating as an automatic behaviour- Inhibition of the desire to overeat- The effect of effort on food intake- The effect of repetition of food and variety

UNIT IV MEDIA, MARKETING& CONSUMPTION 9

Does marketing matter–- Importance of branding to product success- Effect of advertising on eating- Effect of food labels- Packaging messages- Health claims- Logos and endorsements on food products- Buyer Behaviour in Food & Beverages- Influence of media on Buying Behaviour

UNIT V PERSONALITY, MOTIVATION & DIET 9

Emotional influences on food choice- Impulse, Inhibition, eating restraint and intake- Influence of stress and coping- Decision-making styles- Health Campaigns- The relevance of locus of control- Emotional response to experiences- Developing an internal locus of control- Making Changes to eating- Healthy Diet Community

TOTAL: 45 PERIODS

COURSE OUTCOMES:

- To understand the development of food preferences
- To get a broad overview of social psychology of food-related behaviour and attitudes

TEXT BOOKS

1. Jane Ogden, The Psychology of Eating, Second Edition, Wiley- Blackwell Publication, 2010
2. John L. Smith, The Psychology of Food and Eating: A Fresh Approach to Theory and Method , First Edition, Palgrave Macmillan, 2002

REFERENCES

1. R. Shepherd and M. Raats , The Psychology of Food choice, (2006)
2. Goodman, D., & Goodman, M. Localism, livelihoods and the 'post-organic': Changing perspectives on alternative food networks in the United States, 2007
3. In M. Damian, L. Holloway & M. Kneafsey (Eds.), *Alternative food geographies: Representation and practice* (pp. 23-38). Oxford, UK: Elsevier Science.
4. Ronald, P., & Adamchak, R.. Deconstructing dinner: Genetically engineered, organically grown 2008
5. P. Ronald & R. Adamchak *Tomorrow's table: Organic farming, genetics, and the future of food* (pp. 155-168). New York: Oxford University Press.

Faculty of Management Sciences **(Approved in 22nd AC 26.07.2017)** **ITEM NO. FN 19.02(2)**

FN 9011 FINANCIAL ECONOMETRICS L T P C
3 0 0 3

OBJECTIVES:

- To familiarise the student to the principles of financial econometrics in the study of financial development in an economy; to develop analytical skill of financial sector and its elements.

UNIT I UNIVARIATE STATIONARY 9

Time-series Models Introduction to stochastic process, stationary processes, Wold representation theorem, auto covariance functions, autocorrelation and partial autocorrelation, auto regressive and moving average models, conditions for stationary and invertible process, Box-Jenkins approach, forecasting. Seasonal models, de-seasonalization of time series (classical decompositions).

UNIT II UNIVARIATE NONSTATIONARY PROCESSES 9

Nonstationary process, deterministic and stochastic trends, integrated process and random walk, random walk with drift, Unit root process- Martingale process, test for unit root- Dicky Fuller tests, other unit roots tests –PP, KPSS, ARIMA process. Fractional integrated process

UNIT III MODELING VOLATILITY CLUSTERING 9

Volatility-Meaning and measurement, Volatility clustering, Econometric models of volatility, ARCH model, GARCH model and its various extensions, testing for ARCH/GARCH effects, Stochastic volatility models, multivariate GARCH modeling

UNIT IV MULTIVARIATE STATIONARY AND NON-STATIONARY PROCESSES 9

ARDL Models and its applications, vector autoregressive model, Granger causality, impulse response function, variance decomposition, introduction to cointegration, testing for cointegration: Single-equation approaches: ARDL and Engle Granger method, Johansen test for cointegration, Vector error correction model

UNIT V PANEL DATA MODELS 9

Arellano and Bond Estimator, Arellano and Bover Estimator and Blundell and Bond System GMM Estimator, Nonstationarity and Panel data, Panel unit root and cointegration tests, Panel VAR models

COURSE OUTCOMES:

- Students would become acquainted with the statistical tools of econometrics applied in finance. They would also become analytically skillful.

TEXT BOOKS

1. Baltagi, Badi. Econometric Analysis of Panel Data, 5th Edtion, Wiley, 2013.
2. Brooks, C., Introductory Econometrics for Finance, 3rd Edition, Cambridge University Press, 2014.
3. Enders, W., Applied Econometric Time Series, second edition, John Wiley and Sons, 2006.
4. Hamilton, J. D., Time Series Analysis, Princeton University Press, 1994.
5. Johnston J. and DiNardo, J. Econometric Methods. 4th Ed. McGraw-Hill 1997.
6. Maddala G.S. and In-Moo Kim, Unit Roots, Cointegration, and Structural Change, 1998.
7. Pesaran, H.M. Time Series and Panel Data Econometrics¸ Oxford University Press, 2015.

FN 9012 CORPORATE FRAUDS & RISK MANAGEMENT L T P C

3 0 0 3

OBJECTIVE:

- To understand what leads to corporate frauds and what motivates an individual to commit a fraud. Also understand the process of business valuation and factors that influence the value of a business (explore the three basic methods of valuing business). Learn the various risk management systems that are used to prevent and detect corporate frauds.

UNIT I INTRODUCTION TO CORPORATE FRAUDS 9

Understanding Corporate Frauds-Types of Frauds- Motivations for committing financial statement fraud-Categories of fraudulent financial reporting-Application of financial statement analysis techniques- red flags of fraud-Case Studies

UNIT II BUSINESS VALUATION PRINCIPLES 9

Asset valuation- Forms of intangible assets- Share prices -Earnings valuation -Dividend valuation-dividend growth model, including estimating growth from past or forecast figures-non-constant growth assumptions -Discounted free cash flow valuation -Ideas of diversifiable risk (unsystematic risk) systematic risk- Strengths and weaknesses of each valuation method-Validity of the results for use in decision making according to the nature of the target entity (e.g. a division, a whole entity, quoted or unquoted) Valuation of Intangibles (a) Intellectual Property (b) Intangibles (c) Brand Valuation

UNIT III COST OF EQUITY 9

Capital asset pricing model (CAPM)-meaning and derivation of the component -To gear and un-gear betas-cost of capital- discounted cash flow analysis - reference to the nature of the transaction (e.g. division or an entire entity)-Efficient market hypothesis- its relevance for the valuation of quoted entities-Impact of government incentives on entity value

UNIT IV FRAUD RISK ASSESSMENT AND PREVENTION 9

Introduction to Fraud Risk- Fraud Risk Assessment- Criteria for Good Fraud Risk Assessment - Developing an Effective Fraud Risk Assessment-Preparing the Company for the Fraud Risk Assessment- Fraud Prevention and Internal Control- Occupational Fraud Schemes- Fraud Prevention at the Entity Level

UNIT V 9

Introduction-The COSO Enterprise Risk Management Framework-Other Risk Management Frameworks-The Business Case for Managing Fraud Risk- Parties Responsible for Managing Fraud Risk-Objectives of a Fraud Risk Management Program-Steps in Developing a Fraud Risk Management Program- Reporting, Investigating, and Corrective Action-Process Evaluation and Continuous Monitoring

TOTAL: 45 PERIODS

OUTCOMES:

On course completion one will have a knowledge and understanding of:

- Corporate frauds and its impact on the business valuation of a firm, the competitors and the Industry as a whole.
- Fraud theory and prevention
- Compare different fraud risk management frameworks and their various components
- Examine the roles of those involved in the fraud risk management process
- Implement methods for ensuring fraud awareness and establishing an effective anti-fraud culture
- strategies for early fraud detection, the uses and limitations of external and internal audits in fraud prevention
- the role of management in fraud prevention

REFERENCES

1. Corporate Frauds: CIMA PUBLICATIONS, U.K.(May 2009)
2. Managing the Risk of Fraud and Misconduct by Richard H.Girgenti & Timothy P.Hedley McGraw-Hill Education;1 edition (March 9, 2011)
3. Financial Statement Fraud : Prevention and Detection by Zabihollah Rezaee ,Wiley Publication (March 2002)

4. Financial Fraud Prevention and Detection: Governance and Effective Practices by Michael R Young, Wiley Publication (2013)
5. A comparative analysis of corporate fraud by Sally Ramage,. iUniverse Publication (2006)
6. Fraud and corruption: prevention and detection by Iyer, N. and Samociuk, M.,Publisher Routledge (December, 2006)
7. Corporate Governance and Fraud Risk Management by Balwinder Singh, Pearson Education India (2004)