

Revised Syllabus and Scheme of Examination for

MBA (Business Economics)

Submitted to University of Delhi
Delhi

Department of Business Economics

MBA (Business Economics)

**PROPOSED SCHEME OF EXAMINATION
2015**

Max. Marks: 100

Duration: 3 (Hrs)

Semester- 1	
Paper-101	Micro Economic Analysis
Paper-102	Accounting for Business
Paper-103	Marketing Management
Paper-104	Quantitative Techniques in Management
Paper-105	Statistics and Data Analysis
Paper-106	Project Appraisal and New Venture Analysis
Paper-107	Business and Law
Semester- 2	
Paper-201	Macroeconomic Analysis & Policy
Paper-202	International Economics
Paper-203	Firms, Markets and Public Policy
Paper-204	Environmental Economics
Paper-205	Business Finance
Paper-206	Basic Econometrics
Paper-207	Leadership and Organization

Semester-3	
Paper-301	Business, Government & Society
Paper-302	International Financial System
Paper-303	Elective I
Paper-304	Elective II
Paper-305	Elective III
Paper-306	Elective IV
Semester IV	
Paper-401	Contemporary Indian economy
Paper-402	Strategic Management
Paper-403	Elective I
Paper-404	Elective II
Paper-405	Elective III
Paper-406	Elective IV
Part B Dissertation /Case Study (equal to 2 papers and spread over semester 3 and 4)	

Optional Groups (Students Can Choose two of the following optional groups in third semester and two papers in IV semester from each group)

Group-I Quantitative Techniques in Business

1. Advanced Econometrics
2. Time Series Analysis and Business Forecasting
3. Topics in Game Theory
4. Simulation and Modelling in Business Management

Group-II Marketing and Distribution

1. Strategic Marketing
2. Marketing Research
3. Logistics and Supply Chain Management
4. International Marketing
5. Customer Relationship Management

Group-III Finance

1. Financial Derivatives
2. Investment and Portfolio Theory and Management
3. Corporate Restructuring, Mergers & Acquisitions
4. Credit & Risk Management/Financial Risk Management

Group-IV Economics

1. Urban Transportation Economics
2. Energy Economics
3. Infrastructure Economics
4. Agricultural Economics
5. Economics of Health and Education
6. Economics of Climate Change
7. Labour Economics

The new examination scheme will be as follows:

In the proposed examination scheme each paper will be of 100 marks, instead of 80 marks in the existing scheme.

Evaluation

English shall be the medium of instructions and examination. The system of evaluation shall be as follows:

- (i) Each paper shall carry 100 marks. 30% marks shall be reserved for internal assessment based on class room participation, seminar, term papers, test, viva-voce and attendance. The weight age given to each of these factors shall be decided and announced at the beginning of the semester
- (ii) The remaining 70 marks in each paper shall be awarded on the basis of written examination of three hours duration at the end of each semester.
- (iii) Project work shall begin from the third semester of 2nd year and shall be evaluated for 200 marks at the end of fourth semester.
- (iv) The minimum marks for passing the examination of each paper in each semester shall be 45% and 50% in the aggregate of the semester.
- (v) If a student fails or fails to appear in any of the papers in MBA (Business Economics) 1st semester of the 1st year of the university examination, he/she will be allowed to take examination in that paper/s along with the second semester examination of part- I.
- (vi) Admission to 2nd year of MBA (Business Economics) course shall be open to those who have cleared successfully at least 10 papers out of 14 papers offered in the MBA (Business Economics) 1st year course comprising I & II semesters. However, he/she will have to clear the remaining papers while studying in MBA (Business Economics) 2nd year.
- (vii) If a student fails or fails to appear in any of the papers in third semester of 2nd year of university examination, he/she will be allowed to take the examination in the subjects along with examination in the subjects of IV semester of 2nd year examination.
- (viii) In IV semester, a student can appear in any paper of semester I,II or III which he /she has failed to clear.
- (ix) If a student fails in any one of papers of the 4th semester other than Research Project Study, he/she can take the examination in the said paper along with subsequent examinations of I/II semester provided he/she has cleared all papers of earlier semesters.
- (x) Only those candidates who have secured at least 45 percent in each paper and 50 percent in aggregate in each of the semesters of the MBA(Business Economics) course shall be eligible for the award of the Degree . Successful candidates will be classified on the basis of the combined result of Part-I and Part-II examination as follows.

Candidates securing 60% and above	: I Division
All other	: II Division
- (xi) Successful candidates will be classified on the basis of the combined results of 1st year and 2nd year examinations as follows:

Candidates Securing 60% & above	: I Division
Candidates Securing 50% but less than 60%	: II Division
- (xii) The conditions of passing the course shall not be deemed to have been satisfied unless a student undergoes practical training under the supervision of the Department in approved organization for maximum of two months.
- (xiii) No candidate shall be considered to have pursued the course of study unless he is certified by the Department to have attended at least 75% of the total number of lecturers, tutorials, and seminars conducted in each semester during the course of study.
- (xiv)
 - (a) A candidate must qualify for the award of the Degree within four years of his/her first admission to the course.
 - (b) Candidates who fail or failed to appear at the MBA (Business Economics) examination may be allowed to reappear at the examination on being enrolled as an ex student as per rules of the University.
- (XV) No revaluation of answer books is permitted as per the rules of the University applicable to the professional courses.
- (Xvi) A candidate must qualify for the award of the Degree within four years of his/her admission the the MBA (Business Economics) course.

101: MICRO ECONOMIC ANALYSIS

Course objective: The aim of this course is to give a good knowledge of microeconomic theory at an advanced level. By pursuing this course students will be able to gain theoretical knowledge which will help them in their research work.

Course Requirement: This course requires some mathematical foundation which will include functions and continuity, simultaneous equations, rule of differentiability and slope of a curvilinear function, concavity and convexity, partial derivative, integration and area under the curve, optimization of function with one variable and multiple variable cases.

Syllabus

1. Scarcity and choice, Central problems of an economy, Production possibility curve and economic efficiency, Positive and normative economics.
2. **Demand and Supply:** Individual and market demand/supply, Predicting the change in market conditions, Elasticity and its application, Impact of Government intervention.
3. **Consumer Theory:** Preference and utility, Different types of utility functions, Choice and Utility Maximisation, Duality, Indirect utility function and expenditure function, Roy's Identity, Slutsky equation, revealed preference.
4. **Producer Theory:** Technology of production, Production function, Isoquants, Returns to factor and scale, Economies of scope, Elasticity of substitution, Technical progress, short run and long run costs, Cost Minimisation, Shephard's lemma, Profit maximisation, Envelop theorem.
5. **Markets and Strategic Interaction :** Perfect competition, Monopoly and degree of concentration , Price discrimination, Mark up pricing, Marginal cost pricing, Peak-load pricing, Transfer pricing, Two-part tariff ,Bundling, Advertising, Monopolistic competition and oligopoly Market, Factor pricing, Normal form game, Nash equilibrium, Dominant strategies, Maximin and Minimax strategies, Mixed strategy, Prisoner's Dilemma and its implication, Cartels.
6. Basic ideas of welfare economics, Market failure, Externalities, Public goods, behaviour under certainty and uncertainty, Economics of information.

Readings:

Alpha C. Chiang (2005), *Fundamental Methods of Mathematical Economics*, 4th edition, McGraw-Hill Higher Education.

Bernheim B. D. and Michael D. W (2008), *Microeconomics*, Tata McGraw-Hill.

C. Snyder and W. Nicholson(2011),*Fundamentals of Microeconomics*, Indian Edition, Cengage Learning

C. Snyder and W. Nicholson(2012), *Microeconomic Theory: Basic Principles and Extensions* ,11th Edition, Cengage Learning

Dowling Edward T(2001), *Schaum's outline of theory and problems of Introduction to Mathematical Economics*, 3rd edition, McGrawHill, New York.

Geoffrey A. Jehle and Philip J. Reny (2011),*Advanced Microeconomic Theory*, 3rdEdition, Pearson Education India.

Hal Varian (2009), *Intermediate Microeconomics: A Modern Approach*, 8th edition, Affiliated East West Press.

Krugman, Paul and Robin Wells(2012), *Microeconomics*, 3rdEdition, USA, Worth Publishers.

Mankiw N. Gregory (2015), *Principles of Microeconomics*, 7th edition, Cengage Learning

Mansfield, Edwin (1997), *Applied Microeconomics* ,2nd Edition, USA, W.W. Norton and Co

Osborne J. Martin (2003), *An Introduction to Game Theory*, 2nd Edition, Oxford University Press, New Delhi.

Pindyck, R and Daniel Rubinfeld (2012), *Microeconomics*, India, 8th edition, Prentice Hall.

Stiglitz, Joseph.E and Carle E. Walsh (2006), *Principles of Economics*, 4th Edition, W. W. Norton & Company.

102: ACCOUNTING FOR BUSINESS

Course Objective: Managers have to constantly deal with financial reports and financial statements in order to extract relevant information specific to the problem at hand. This course aims to provide skills to the students so that they can prepare and interpret financial statements and reports pertaining to different business.

Syllabus

1. **Introduction to Accounting system:** Nature and Purpose of Accounting; Financial Accounting Framework – Accounting as a language, Users of Accounting Information; Accounting Measurement Assumptions; Generally Accepted Accounting Principles; Accounting Equation; Accounting Standards – Indian Accounting Standard & International Financial Reporting Standards ; Overview of Financial Statements.
2. **Accounting Records & Systems:** Basics of Record keeping; Accounting Process; Double Entry system; Format of an Account; Recording Transactions- Journal, Ledger, Chart of Accounts, Posting; Trial Balance; Adjustments & Closing Process.
3. **Income measurement/Revenue recognition and Current assets:** Revenue recognition criteria as per Indian Accounting Standard. Methods of revenue recognition for merchandizing firms, constructions contracts, franchises, leasing firms, Treatment of bad debts, returns, credit card sales, warranty costs discounts. Costs of goods sold, operating expenses. Preparation of Income Statement, Treatment of Extraordinary items and discontinued operations. Current assets-Meaning and accounting treatment as per Indian Accounting Standard.
4. **Cost of sales and Inventories:** Classification of Inventories; Determination of Physical Inventory; Measurement of Inventory: cost or net realizable value, Inventory Valuation – Specific Identification method, FIFO, weighted average cost method, retail method. Relevant provisions Indian Accounting Standard 2.
5. **Accounting for Long Term Assets:** Types, Cost of Acquisition; Accounting for depreciation-methods, choice of method, change in the method, depreciation for Income Tax purposes; Disposal of Assets; Intangible Assets; Natural Resources & Impairment of assets. Main provisions of Indian Accounting Standard 16 and Indian Accounting Standard 36, Indian Accounting Standard 113-fair value measurement.
6. **Shareholders' Equity and Liabilities:** Components of Shareholders' Equity; Accounting for Share Capital; Reserves & Surplus; Bonus ; Dividends; Statement of Changes in Equity; Earnings Per Share. Liabilities-meaning, Classification of Liabilities - Current, Long-Term Liabilities, Contingent Liabilities, Off balance sheet financing, Deferred taxes, Main provisions of relevant Indian Accounting Standard.
7. **Statement of Cash Flows:** Purpose of Cash Flow Statement; Structure of Cash Flow Statement; Preparation & Reporting of Cash Flow Statement. Main provisions of relevant Indian Accounting Standard 7.
8. **Analysis of Financial Statements:** Financial Ratio; Horizontal Analysis; Vertical Analysis; Ratios – Profitability, Liquidity, Leverage etc. Making intra-firm and inter-firm comparisons.

9. **Basic Cost Management Concepts:**Cost Concepts; & Cost Behaviour; Cost Classification – Product cost, Period cost & expenses; Variable & Fixed costs. Cost sheet.
10. **Cost Analysis for Managerial Decisions:**Variable Costing & Absorption Costing – Differences in their implications; Cost-Volume-Profit Analysis, Single & Multiple product situations; Break-even point Analysis; Margin of Safety; Short-run decision analysis and Relevant Costs.
11. **Cost Analysis for Control:**Standard Costing-Meaning, Managing Costs; Setting Standards; Suitability and Limitations; Variance Analysis- Direct Material Variance, Direct Labour Variance, Overhead Variance; Cost Variance Analysis; Controlling for Variances.
12. **Budgeting and Budgetary Control:**Meaning of Budget and Budgetary Control; Master Budget; Installation of Budgetary Control System; Classification of Budgets; Preparation of Fixed and Flexible Budgets; Control Ratios; Zero Base Budgeting.

Readings

Anthony, Robert N., David F. Hawkins & Kenneth A. Merchant ,(2010), *Accounting – Text and Cases*, 12th Edition, Tata Mc-Graw Hill.

Bhattachrya, S.K. & John Dearden,(1998), *Accounting for Management - Text & Cases*, Vikas Publishing House.

Hilton, Ronald W, (2005) *Managerial Accounting*, McGraw Hill, New York.
Horngren, Charles T., Gary L. Sundem& William O. Stratton, (2013) *Introduction to Management Accounting*, Pearson Education.

Kimmel, Paul, Jerry Weygandt, & Donald Kieso, (2010), *Financial Accounting – Tools for Business Decision Making*, Wiley India.

Narayanaswamy, R. ,*Financial Accounting - A Managerial Perspective*, (2014), PHI Learning.

Young, S. David & Jacob Cohen, (2013) *Corporate Financial Reporting & Analysis*, Wiley.

103: MARKETING MANAGEMENT

Course Objective: This course addresses the management challenge of designing and implementing the best combination of marketing actions to carry out a firm's strategy in its target markets. Specifically, this course seeks to develop the students' skills in applying the analytic perspectives, decision tools, and concepts of marketing to decisions

Syllabus

1. Introduction: Changing dictates in business & marketing , introduction to marketing mix & its components and marketing & Ethics
2. Macro & Micro business environment analysis, Competitive analysis
3. Understanding consumer behavior leading to STP and Differentiation
4. Product & its management: Understanding classifications & types of products/services, product & market maturity levels, product life cycle & management through PLC.
5. New product management: Understanding new product , idea generation points , process & development stages , decisions involved , typical launch methods
6. Product & brand issues : Definition , brand equity , common branding strategies , building successful brands
7. Pricing & its management: Objectives , methods & approaches , positions & factors involved , global exposure- issues & challenges
8. Distribution : Importance , distribution mix & functions , formats & levels , planning distribution , channel management , concepts in LSCM
9. Promotion & advertising : Core requirement for effectiveness , promotional mix ,challenges ,common methods –advertising, PR & SP
10. Sales & marketing: Marketing & selling –Understanding the difference , buyer's expectations , types of selling
11. Organizing the marketing effort: Marketing control, organizing marketing department
12. Industrial, services, rural, digital, global marketing-critical points: Issues & challenges

Readings:

Kotler,Philip, Kevin Lane Keller, Abraham Koshy, MithleshwarJha - *Marketing Management- A South Asian Perspective*: 14th Ed, by Pearson Education
Kumar, Arun and N. Meenakashi,(2007): *Marketing management*, India,Vikas publishing
Kurtz, David L. and Louis E. Boone, (2007): *Principles of marketing*, USA,Thomson-south-western.
Ramaswamy and Namakumari - *Marketing Management* 5th edition

104: QUANTITATIVE TECHNIQUES IN MANAGEMENT

Course Objective: The objective of this course is to equip students with tools to apply mathematical models in decision making. The quantitative analysis approach is used which consists of defining a problem, developing a model, acquiring input data, developing a solution, testing the solution and analyzing and implementing the results.

Syllabus

1. Linear Programming: Basic Assumptions, Formulating LP problems, Graphical Analysis, Solving Minimization problems, Sensitivity Analysis, Simplex Method—Setting up initial Simplex Solution, Simplex solution procedures, Solving LP Maximization Problems, Surplus and Artificial variables, Solving Minimization problems, Special cases, Sensitivity Analysis, The Dual
2. Transportation and Assignment Models: Setting up a Transportation problem, Initial Solution: Northwest Corner Rule, Stepping-Stone method, MODI method, Vogel's Approximation method, Unbalanced transportation problems, Special Cases, Approach of Assignment Model, Hungarian Method/Flood's Technique, Unbalanced Assignment problems, Maximization Assignment Problems.
3. Integer Programming, Goal Programming and Non-linear Programming: Integer programming—Modelling with binary variables, Goal programming, Non-linear programming.
4. Decision Theory: Decision making under Uncertainty—Maximax, Maximin, Criterion of Realism, Equally likely, Minimax Regret, Decision making under Risk—Expected monetary value, Expected value of perfect information, Expected Opportunity loss, Decision Trees, Utility Theory
5. Network Models and Project Management: Minimal Spanning Tree technique, Maximal-flow technique, Shortest-Route Technique, PERT and CPM
6. Inventory Control Models: Importance of Inventory control, Inventory decisions—Economic Order Quantity (EOQ), Reorder Point, EOQ without instantaneous receipt assumption, Quantity Discount models, Use of safety stock, ABC analysis, Just in time inventory control, Enterprise resource planning (ERP).
7. Queuing Theory: Characteristics of a Queuing System, Single channel queuing model with Poisson Arrivals and Exponential Service, Multiple channel queuing model with Poisson Arrivals and Exponential Service, Constant Service time model,
8. Simulation Modelling and Markov Analysis: Advantages and disadvantages, Monte Carlo Simulation, Simulation and inventory analysis, Simulation of a queuing problem, States and State probabilities, Matrix of transition probabilities, Equilibrium conditions.

Readings:

- Hillier, Frederick and Gerald Lieberman (2015) Introduction to Operations Research (10th Edition). McGraw-Hill

- Render, Barry, Ralph M. Stair, Jr. and Michael E. Hanna (2014) Quantitative Analysis for Management (12th edition) Pearson Education.
- Taha, H.A. (2005) Operations Research: An Introduction. (9th Edition) Pearson Education

105: STATISTICS AND DATA ANALYSIS

Course Objective : The objective of this course is to develop essential data handling skills and to equip students with basic statistical tools for analyzing cross-section and time-series datasets using EXCEL and STATA. It also seeks to provide a strong foundation in probability theory and statistical inference.

Syllabus

1. Descriptive Statistics and Exploratory Data Analysis : Measures of Location, Variability, Distribution and Association between two variables (including Stem and Leaf Displays, Box Plots, Cross-tabulation, Cumulative Distribution, Percentiles, Quartiles, Coefficient of Variation, Skewness, Kurtosis, Lorenz Curve, z-scores, Chebyshev's Theorem, Covariance and Correlation, Index Numbers)
2. Basic probability theory : Axioms of probability; Conditional probability; Bayes' Theorem
3. Discrete and Continuous Probability Distributions : Features of univariate and joint probability distributions (Expected values and their properties; Properties of Conditional Expectation; Law of Iterated Expectations), Binomial, Poisson, Hypergeometric, Uniform, Normal, Standard Normal, Exponential distributions.
4. Statistical Inference (Sampling and Estimation) : Random Sampling, Point Estimation, Properties of Estimators (unbiasedness, efficiency, consistency, asymptotic normality), Sampling Distribution of Sample Mean and Proportion, Chi-square, t and F distributions, Convergence in Probability, Law of Large Numbers, Convergence in Distribution, Central Limit Theorem; Interval Estimation and Confidence Intervals for population parameters.
5. Statistical Inference (Hypotheses Testing): Null and Alternate Hypotheses; One-tailed and two-tailed Tests; Type I and Type II errors; Power of a Test; p-values;
Parametric Tests : Tests about population mean, proportions and variances (from a single and from two populations); Tests of Goodness of Fit and Independence.
Nonparametric Tests : Sign Test; Wilcoxon Signed-Rank Test; Mann-Whitney-Wilcoxon Test; Kruskal-Wallis Test; Test for Significant Rank Correlation
6. Analysis of Variance : One-way and Two-way; Testing for Equality of k Population Means; F-test
7. Simple Linear Regression : The 2-variable OLS Model, Assumptions, Estimation, Interpretation of Coefficients, Hypotheses Testing, Prediction and Residual Analysis.
8. Time Series Analysis : Components of Time series (Trend, Cyclical, Seasonal, Irregular components); Smoothing Methods (Moving Averages, Exponential Smoothing); Trend and Seasonality Analysis (Linear trend; Deseasonalizing Time series)

Readings

Anderson, D., D.Sweeney and T.Williams (2013): "Statistics for Business and Economics", Cengage Learning : New Delhi.

Clare, Morris, (2007): Quantitative approaches in business studies, U.K Great Britain, Pearson Education Ltd.

Freund, J.E. : "Mathematical Statistics", (Latest Edition), Prentice Hall : India.

Goon, A.M. Gupta and Das Gupta B (2002): Fundamentals of Statistics (Vol I & Vol II), World Press

Levin, R.D. and Rubin D.S, (2005) : Statistics for management , India , Pearson Education

Mood, A.M., F.A.Graybill and D.C.Boes (1974) : "Introduction to the Theory of Statistics", McGraw Hill : New York.

Woolridge, J. : “Introductory Econometrics : A Modern Approach”, (Latest Edition), Cengage Learning : New Delhi (Appendix B (‘Fundamentals of Probability’) and C (‘Fundamentals of Mathematical Statistics’)).

106: PROJECT APPRAISAL & NEW VENTURE ANALYSIS

Course objective: This course aims to equip students for understanding the importance of the new investment project vis-à-vis total economy functioning. Further, the students would be able to prepare feasibility report for any new venture / start - up, understand its planning and implementation.

Syllabus

1. Project Appraisal - An introduction: Project Cycle, Development Planning & Project choice.
2. Market Analysis of a Project: Project Identification and Design, Market and Demand Analysis of a Project, Competitiveness of the market.
3. Technical Analysis of a Project: Technical Analysis, Business and Technology, Acquisition, Management of Technology.
4. Financial Analysis of a Project: Estimate Cost of project, means of finance, working capital requirements and financing, time value of money, cost of capital, Evaluation of project investments using non discounting and discounting criteria.
5. Economic Analysis of a Project: Rationale for social Cost Benefit Analysis, UNIDO Approach to Project Appraisal, Little Mirrless Approach, World Bank Approach, Project Appraisal and Indian Plans.
6. Impact Analysis of a Project: Environment impact, Benefit Estimation in social and infrastructure Projects.
7. Entrepreneurship: Entrepreneurship Theories and Perspective, Corporate Entrepreneurship
8. Risk and Sensitivity Analysis: Scenario Analysis, Simulation Approach and Decision Tree Analysis.

Reading list

1. Boardman A, D Greenberg, A Vining and D Weimer (2014). *Cost-Benefit Analysis – Concepts and Practice*, Harlow: Pearson.
2. Chandra, Prasanna (2010). *Project Planning Analysis Selection Implementation and Review*, Tata McGraw Hill Publication.
3. Clifton, David and David Fyfee (1977). *Project Feasibility Analysis*, Wiley-Interscience Publication
4. Cuervo, Alvaro, Domingo Ribeiro and Salvador Roig (2007). *Entrepreneurship*, Springer
5. Glasson J, R Therivel and A Chadwick (2012). *Introduction to Environmental Impact Assessment*, Routledge.
6. *Harvard Institute of International Development- Harvard University*, Development Discussion Paper No. 755, February 2005, Page No. 1-46, Market Analysis and Competitiveness in Project Appraisal, Savvakis C. Savvakis
7. Imboden, N. (1980). *A management approach to Project Appraisal and Evaluation*, OECD Publication.
8. Kirkpatrick, Colin and John Weiss (1996). *Cost Benefit Analysis and Project appraisal in Developing Countries*, Edward Elgar

9. Mitra, J (2012). *Entrepreneurship, Innovation and Regional Development*, Routledge Publication.
10. Potts, David (2005). *Project Planning and Analysis for Development*, Viva Books Pvt. Ltd.
11. UNIDO (1972). *Guidelines for Project Evaluation*, Oxford and IBH Publishing Co.

107: BUSINESS AND LAW

Course Objective: The objective of this course is to learn the legal framework of the business in which enterprises operate. This includes the basics of contract act, companies act and other new legislations which have been enacted with the changing business environment.

Syllabus

1. Indian Contract Act, Law of contract, meaning of contract, agreement, essential elements of a valid contract, classification of contracts, proposal and acceptance, free consent, void agreement
2. The Indian Companies Act, 1956: Meaning and types, incorporation, memorandum & articles of association, prospectus, issue of shares and bonus shares, rights issue, sweat equity, role of directors, share qualification, company meetings and management. The Limited Liability Partnership Act, 2008: meaning and nature of limited partnership, formation, partners & their relations, extent and limitation of liability.
3. Information Technology Act, 2000: Scheme of the act, definitions, digital signature, electronic governance.
4. Competition Act, 2002: objectives, definitions, competition policy, prohibition of certain agreements and abuse of dominant position.
5. Consumer Protection Act 1986: Objectives and machinery for consumer protection, defects and deficiency removal, rights of consumers.
6. Intellectual Property Rights: The Patents Act, 1970, The Copyright Act, 1957, The Trade Mark Act, 1999.
7. Foreign Exchange Management Act, 1999
8. The Right to Information Act, 2005: Salient features of the act and its redressal mechanism

Readings:

Ahuja, V K (Latest Edition): Law Relating to Intellectual Property Rights, Lexis Nexis
Chawla, Alka (Latest Edition), Law of Copyright Comparative Perspectives, Lexis Nexis
Foreign Exchange Management Act, 1999
Kamath, Nandan (Latest Edition), Law Relating to Computers, Internet and E-Commerce, Universal Law Publishing Co.
Lal, Rattan & Lal, Dhiraj (Latest Edition), Law of Torts, Lexis Nexis
Sharma, Vakul (Latest Edition), Information Technology Law and Practice, Universal Law Publishing
Singh, Avtar (Latest Edition), Company Law, Eastern Book Company
Singh, Avtar (Latest Edition), Competition Law, Eastern Book Company
Singh, Avtar (Latest Edition), Contract and Specific Relief, Eastern Book Company
Verma, R.K., (Latest Edition), Right to Information Law & Practice, Taxmann

SEMESTER II

201: MACROECONOMIC ANALYSIS AND POLICY

Course Objective: The Course seeks to provide grounding in basic macroeconomic theory and policy in a globalized world, with a focus on applications, especially in context of emerging economies like India

Syllabus

1. Basic Accounting Concepts and Tools in Closed and Open Economies: National Income Accounting, Exchange Rates and Balance of Payments Accounts.
2. Keynesian Theory of the Short-run: Determination of equilibrium output and interest rate (Simple Keynesian and IS-LM models); Monetary and Fiscal Policies in Closed Economies; Government Debt; Channels of Monetary Transmission
3. Open Economy IS-LM Framework : Monetary and Fiscal Policies in Open Economies (with Fixed and Flexible Exchange rates); Interest rates and Exchange rates in open economies (Interest-parity condition)
4. The Labour Market and Policy analysis in AS-AD Framework
5. Analysis of Inflation and Unemployment : The Phillips Curve and theories of unemployment
6. Theories of Economic Growth : Harrod-Domar Model; Solow Model; Evidence on Convergence and Conditional Convergence; Theories of Endogenous Growth
7. Macroeconomic Crises : Causes, implications and policy response associated with the Global Financial crisis; the role of banks (including shadow banks), asset price bubbles and conventional and unconventional monetary and fiscal policy

Readings

- Barro, R. and X. Sala-i-Martin (2005) : “Economic Growth”, Prentice Hall : India.
- Blanchard, O. (2013) : “Macroeconomics”, (6th Edition), Pearson Education : New Jersey, USA.
- Blanchard, O. J., Faruquee, H., Das, M., Forbes, K. J., & Tesar, L. L. (2010). The Initial Impact of the Crisis on Emerging Market Countries [with Comments and Discussion]. *Brookings Papers on Economic Activity*, 263-323.
- De Souza, E. (2008) : “Macroeconomics”, Pearson Education : New Delhi.
- Jones, C. : (2007) : “Introduction to Economic Growth”, W.W. Norton : New York.
- Mankiw, N. G., and Romer D. Weil. ND (1992) : “A Contribution to the Empirics of Economic Growth.” *Quarterly Journal of Economics*: 407-438.
- Mishkin, Frederic S. (1995) : "Symposium on the Monetary Transmission Mechanism." *Journal of Economic Perspectives* 9.4: 3-10.
- Ray, D. (1998) : “Development Economics” , selected chapters, Princeton University Press : New Jersey.
- Romer, D. (1996) : “Advanced Macroeconomics”, McGraw-Hill : New Delhi.
- Sikdar, S. (2006) : “Principles of Macroeconomics”, Oxford University Press : New Delhi.
- Periodicals and Databases** : *Economist* (Latest issues); *Economic Survey, Govt. of India* (Various Issues); “Database on Indian Economy” (Reserve Bank of India website); “World Development Indicators” (World Bank); “United Nations National Accounts Statistics” (United Nations)

202: INTERNATIONAL ECONOMICS

Course Objective: This course seeks to equip students with a basic understanding of theories of international trade. It also provides an introduction to trade policy issues and to the role of the WTO.

Syllabus

1. Theories of International Trade : Theories of Absolute Advantage, Comparative Advantage and Opportunity Costs. Heckscher Ohlin Theory of Trade (Factor Price Equalization, Stolper-Samuelson theory); Empirical evidence on Heckscher-Ohlin Theory.
2. General equilibrium model of trade: Offer curve, Terms of trade; Trade and welfare; Immiserizing growth; Policy analysis in the standard trade model.
3. Modern trade theories: Imperfect competition and economies of scale; Intra-industry trade.
4. Theory of Tariff and Non-tariff Barriers: Partial equilibrium Analysis of Tariff; Effects of Tariff on Consumer's and Producer's Surplus; Various Non-tariff Barriers
5. Regionalism: Various Forms of Economic Integration; Theory of Customs Union. Dependency theories.
6. Political economy of Trade policy: Controversies in trade policy; Multilateral trading arrangements; Introduction to WTO and an overview of its functioning

Readings

Appleyard, Denis R. and J, Alfred Field, (1998): *International economics*, London, McGraw Hill

Bhagwati, J (1987) : *International economics*, selected readings, USA, M.I.T. Press.

Bhagwati, J. and Srinivasan, T.N. (1972), *lectures on international trade*, Cambridge Mass., M I T Press.

Salvatore, Dominick (2011) : *International Economics: Trade and Finance*, John Wiley International Student Edition, 10th edition.

Sikdar, S. (2002) : *Contemporary Issues in Globalization : An Introduction to Theory and Policy in India*, Oxford University Press : New Delhi.

Krugman, Paul, Maurice Obstfeld, and Marc Melitz (2012) :, *International Economics: Theory and Policy*, Addison- Wesley (Pearson education indian Edition), 9th edition.

203: FIRMS, MARKETS AND PUBLIC POLICY

Course Objective: The objective of this course is to give students an insight into the relationship between firms, markets and public policy using the theory of industrial organization, and game theory.

Syllabus

1. The relationship between firms, markets and policy.
2. Oligopoly and Strategic Interaction: Introduction to Game Theory, Static Models of Oligopoly—Cournot model, Price competition—Bertrand model, Strategic complements and substitutes, Dynamic Games (First and Second Movers)—Stackelberg Model
3. Structure-Conduct-Performance Paradigm: Market Structure—measures, barriers to entry, relationship between market structure and entry barriers; Market Conduct--Pricing behavior, Product strategy, Research and innovation, Advertising, Legal Tactics; Market Performance--Production and allocative efficiency, Progress, Full employment, Equity
4. Theory and Growth of the Firm: Characteristics, Boundaries of the firm, Transaction cost theory of the firm, Separation of ownership and control—Agency problem, Size and growth, Vertical Organization, Product diversification, Mergers and Acquisitions, Horizontal and Vertical Differentiation
5. Non-Price Competition: R&D and innovation, market structure and R&D, Dynamics of R&D Competition, Patents and Patent Policy, Advertising: Market Power and Information, Competition and Brand Names
6. Performance Indicators: Production and allocative efficiency, Progress, Full employment, Equity
7. Networks and Auctions: Networks, Competition and Complementary services, Network goods and Public Policy, Auctions and Auction markets
8. Public Policy: Law and Economics, Antitrust legislation, Regulation and Deregulation

Readings:

- Cabral Luis M.B. (2000) Introduction to Industrial Organization. Cambridge, MA: MIT Press
- Pepall, Lynne, Dan Richards and George Norman (2008) Industrial Organization: Contemporary Theory and Empirical Applications 4thEdn. Malden, MA: Blackwell Publishing
- Tirole, Jean (1988) Theory of Industrial Organization. Cambridge MA: MIT Press
- Tremblay, Victor J., and Carol Horton Tremblay. (2012) New Perspectives on Industrial Organization. New York: Springer.
- Journal articles where required

204: ENVIRONMENTAL ECONOMICS

Course Objective: This course aims to provide exposure to the students about the basic concepts and importance of natural resource management. The students would be able to appreciate the urgency for protection, nurturing and management of Natural Resources.

Syllabus

1. The Economy and the Environment: Neo Classical perspective, Ecological perspective.
2. Sustainable Development: Concepts, Theories and Principles of Sustainable Development.
3. Externalities: Public Goods, Market Failure, Property rights.
4. Economic incentives for Environmental Protection: Market Based Instruments, Command and Control, Marketable permits, Alternative approaches.
5. Environment Impact Assessment Valuation Techniques: Stated Preference approaches, Surrogate Market approaches, Conventional market approach, Household production function approach.
6. Climate Change & Ecosystem services: Ecosystem function, Kyoto Protocol and other International Agreements
7. Environment Policy of India: Objectives and Implementation
8. Environment Management in Business Firm: Life Cycle assessment, measuring environmental performance, Strategic Environmental Management as Competitive Strategy.

Reading list

1. Brady, John (2006). *Environmental Management in organizations*, Earthscan Pub.
2. Bromely, Daniel E *The Handbook of Environmental Economics*
3. Connor, Robin and Stephen, Dovers (2004). *Edward Institutional Change for Sustainable Development*, Edward Elgar Publishing.
4. Folmer, Henk, Hlandis Gabel and Hans Opschoor (1997). *Principles of Environmental and Resource Economics*, Edward Elgar Pub
5. Hanley, Nick, Jason F Shogren & Ben White, (2008). *Environmental Economics*, Macmillan.
6. Hart, Stuart L (1997). *Strategies for Sustainable World*, Harvard Business Review.
7. Hussan, Ahmed M (2004). *Principles of Environmental Economics*, Routledge Publication.
8. James, David. *Application of Economic Techniques in Impact Assessment*.
9. Kerr John, M, Marothia, Dinesh K, Singh, Katar, Ramaswamy, C and Bentaly, William R (1997). *Natural Resource Economics*, Oxford & IBH Publication.
10. Pearce, David, Giles Atkinson and Susana Mourato (2006). *Cost –Benefit Analysis and Environment*, Earthscan Pub.
11. Roger, Perman (1995). *Natural Resources and Environmental Economics*, Longman Publication.
12. Richard, Welford *The Context of Corporate Environment Management*.
13. Therivel, Riki (2004). *Strategic Environmental Assessment in Action*, Earthscan Publication.

205: BUSINESS FINANCE

Course Objective: This course aims at equipping the participants with the basic tools, techniques, and theories necessary for corporate financial decision-making especially while investing, raising funds, and rewarding the shareholders of a business organization.

Syllabus

1. **Introduction:** What is Finance? Introduction to corporate finance decisions; Objectives of Finance function; Agency Problem and Corporate Governance; Relationship of Finance with Economics & Accounting; Emerging role of Finance Manager in India; Introduction to Financial Markets & System; Overview of Indian Financial System.
2. **Time Value of Money:** Concept of Time Value of Money; Compound Value; Present Value; Annuity; Perpetuity; Applications of concepts; Valuation of securities; Use of MS Excel functions.
3. **Investment Decisions:** Nature of Investment Decisions; Capital Budgeting Process; Techniques of Capital Budgeting - Payback Period, Accounting Rate of Return, Net Present Value, Internal Rate of Return, Profitability Index, Discounted Payback Method; Modified IRR; NPV vs. IRR; Multiple IRRs and its resolution; Choice between projects with unequal life; Capital Budgeting under constraints; Risk Analysis in Capital Budgeting.
4. **Estimation of Cash Flows:** Meaning of Cash Flows - *Profits vs. Cash Flows*; Cash Flow estimation Process; Basic principles of Cash Flows estimation; Biases in cash flow estimation.
5. **Cost of Capital:** Concept of Cost of Capital; Cost of Debt; Cost of Equity – DDM & CAPM, beta estimation, Levered and Unlevered beta; Weighted Average Cost of Capital; Floatation Costs.
6. **Market Efficiency:** Concept of Market efficiency, Forms of market efficiency, efficient markets and implications of efficient markets.
7. **Financing Decisions:** Concept of Operating, Financial, and Total Leverage; Theories of Capital Structure - Net Income Approach, Traditional Approach; Net Operating Income Approach, MM Hypothesis, Pecking Order of Financing; Designing Capital Structure; EBIT-EPS Analysis.
8. **Sources of Long-Term Funds:** Features of Equity funding; Distinguishing features of Debt, Hybrid Securities – Convertible Debentures, Zero Coupon Bonds, Option-linked Bonds; Secured Premium Notes; Warrants; Private Equity; Venture Capital & Securitisation.
9. **Dividend Decision:** Issues in Dividend Policy; Relevance of Dividend Decision (Walter's Model, Gordon's Model); Irrelevance of Dividend Decision (MM Hypothesis); Determinants of Dividend Policy; Forms of Dividend; Legal Aspects of Dividends.
10. **Working Capital Management-Overview:** Concepts of Working Capital; Need for Working Capital; Concept of Operating Cycle; Determinants of Working Capital; Approaches to Working Capital Financing, Estimation of Working Capital requirements.
11. **Managing Cash, Inventory, and Receivables:** Cash Planning & Budgeting; Cash Collection & Disbursement System; Reducing need for Cash Balance, Investing surplus funds; Techniques of Inventory Management (EOQ & Re-order point); Monitoring & control of Inventories; Credit Policy-Nature & Goals; Credit Policy Variables (Credit Standards, Credit Terms, Collection Efforts); Impact of changes in Credit Policies; Credit Evaluation; Monitoring Receivables; Factoring-Nature, Types, and Financial Evaluation.
12. **Working Capital Financing:** Bank Financing – Norms and procedure; Assessment methods of Working Capital requirements by Banks; Instruments of Working Capital Financing in India

Readings

Brealey, Richard A., Stewart C. Myers, Franklin Allen, & Pitabas Mohanty, (2014) *Principles of Corporate Finance*, McGraw Hill.

Chandra, Prasanna, (2012), *Financial Management-Theory & Practice*, Tata McGraw Hill.

Damodaran, Aswath, (2004), *Corporate Finance - Theory & Practice*, Wiley India.

Pandey, I.M., (2014), *Financial Management*, Vikas Publishing.

206: BASIC ECONOMETRICS

Course Objective: This course is designed to give basic understanding about econometrics. During this course students are provided the basic knowledge of using statistical packages. They can use these tools to empirically test the various economic theories.

1. Nature and Scope of econometrics, Methodology of econometrics

2. **Classical Linear Regression Model(CLRM):**

Two Variable Regression Model: Concept of Population Regression Function & Sample Regression Function, Stochastic & non stochastic model, Method of OLS, Assumptions of CLRM, Properties of OLS estimators, Gauss-Markov Theorem, Goodness of fit, Hypothesis Testing: Interval estimation and test of significance approach.

Multiple Regression Analysis: Assumptions and interpretation of multiple regression equation, R^2 and \bar{R}^2 , Hypothesis testing: for individual and overall significance, for equality of two regression coefficients, and for linear equality restrictions.

3. **Functional forms of regression models:** Regression through the origin, Log-Linear models, Semilog models, Reciprocal models

4. **Dummy Variable Regression models:** Nature of dummy variable, ANOVA and ANCOVA models, Interaction effect of dummy variables, Dummy variable v/s Chow test.

5. **Relaxing CLRM assumptions:**

Multicollinearity: Nature, Consequences, Detection techniques and remedial measures.

Heteroscedasticity: Nature, Consequences, Detection techniques and remedial measures.

Autocorrelation: Nature, Consequences, Detection techniques and remedial measures.

6. **Model Specification:** Model selection criteria, Types of specification errors and their consequences, Methods to detect the specification error, Nested v/s Non-Nested model, Tests of Non-Nested hypotheses.

Readings:

Dougherty Christopher (2011), *Introduction to Econometrics*, 4th edition, Oxford University Press, Indian edition.

Gujarati D. N. and D.C. Porter(2009), *Essentials of Econometrics*, 4th Edition, McGraw Hill International Edition.

Kmenta Jan (2008) ,*Elements of Econometrics*, Indian Reprint, Khosla Publishing House.
Maddala, G.S. and KajalLahiri (2009), *Introduction to Econometrics*, 4th Edition, John Wiley & Sons Ltd.
Ramanathan, R. (2002), *Introductory econometrics with applications*, 5th Edition ,Cengage Learning.
Wooldridge, J.M. (2012), *Introductory econometrics: A modern approach*, 5th Edition,Cengage Learning

207: LEADERSHIP and ORGANISATION

Objective of the Course:

The objective is to understand the leaders and their role in Organizations. The course is divided into two parts: first focusing on leadership and second on organization behavior.

Leadership

Definition and nature of Leadership ; Comparison between management and leadership ; Theories of Leadership; Leader capacity vs. competence ; Courage and moral leadership; Followership ; Leading Teams; Developing leadership diversity ; Strategic leadership ; Shaping culture and values; Leading learning organizations ; Leading change

Organization Behaviour

Individual behaviour at work : Personality, value and attitude, perception , learning and reinforcement, motivation . Group dynamics, team work for effective organization. Organizational processes: Leadership, communication.

Power and politics in organization, organizational culture, stress and conflict management.

Organizational change and development, organizational learning. Transactional analysis, personal growth; JOHARI window

Readings and References:

- Barbuto&Barbach (2006). The EI of Transformative Leaders
- Golemen (2003). Emotional intelligence
- Grojean et al (2004). Leaders, values and organizational climate
- *Luthan's Fred, (latest ed): Organisational behavior, New York, McGraw Hill*
- Maulding (2002). EI and successful leadership
- *MirzaSaiyadain, (latest ed): Organizational behaviour, India,TataMcGraw Hill*
- Northouse, P. (2010) *Leadership Theory and Practice*, 5th edition (Sage: Thousand Oaks) Chapter 9.
- Piccolo & Colquitt (2006). Transformational leadership and job behaviours
- *Prasad L and Banerjee, A.M., (latest ed): Management of human resources, New Delhi ,Sterling publisher (P) Ltd.*
- *Robbins, Stephen P, (latest ed): Organisational behavior concepts, controversies and applications, New Jersey, Prentice Hall,*
- Shivers-Blackwell (2006). Influence of perceptions
- *UdaiPareek, (latest ed): Practical organizational behaviour, U.K Oxford university press.*
- Weinberger (2004). EI and leadership style

SEMESTER III

301: BUSINESS, GOVERNMENT AND SOCIETY

Course Objective: The objective of this course is to examine the political, regulatory, societal, cultural, and natural factors that shape business' nonmarket environment. Business enterprises function in both a market and a nonmarket environment. The non-market environment is the space where the formal and informal rules governing market competition are set and enforced. Successful businesses align the firm's capabilities with the demands of both its market and nonmarket environment. The course will examine markets, market failures, the role of government in correcting market failures, and government failures.

Syllabus

1. Political Economy: Relationship among Business, Government and Society(BGS): Importance of Business, Government and Society to Managers ; Models of BGS relationships, Political economy- competitive capitalism and regulated capitalism, Ethical Capitalism , Socialism ; Historical Forces changing the Business Environment – Key environments of Business – Power dimensions of Business – Theoretical perspective – Sociological perspective
2. Corporate Governance: Corporate Governance- Meaning, importance and significance; Genesis of Modern Corporate, Shareholder's Democracy: A myth; Corporate Governance mechanism, Corporate Governances models, Corporate Governance in various countries, Drivers of corporate Governance; obligation to society, obligation to investors, obligation to employees, obligation to customers, managerial obligation; Corporate Governance in India, Evolution of Institutional framework.
3. Public Policies: Market failures and Government policy; The role of public policies in governing business, Government and public policy, classification of public policy, areas of public policy, need for public policy in business, levels of public policy, elements of public policy, the corporation and public policy, framing of public policy, business and politics- levels of involvement, business, government, society and media relationship ; government regulations in business, justification of regulation, types of regulation, problems of regulation
4. Business Ethics: Meaning of ethics, business ethics, relation between ethics and business ethics, evolution of business ethics, nature of business ethics, scope, need and purpose, importance, approaches to business ethics, sources of ethical knowledge for business roots of unethical behavior, ethical decision making, some unethical issues, benefits from managing ethics at workplace, ethical organizations
5. Environmental concerns and corporations: History of environmentalism, environmental preservation-role of stakeholders, international issues, sustainable development, costs and benefits of environmental regulation, industrial pollution, role of corporate in environmental management, waste management and pollution control, key strategies for prevention of pollution, environmental audit, Laws governing environment
6. From Social Responsibility to Shared Value into Social Progress: Types and nature of social responsibilities, CSR principles and strategies, models of CSR, Best practices of CSR, Need of CSR, Arguments for and against CSR, CSR Indian perspective; movement from CSR to shared value and beyond the thinking of social progress

Readings:

- AC Fernando, 2009 : Business Ethics: An Indian Perspective, Pearson
- Boatright 2007, Ethics and the conduct of Business, fifth edition, Pearson pub
- C. Handy, "What's a business for?" *HBR* Dec 2002
- D. Hogberg, "The Rainforest Action Network," Capital Research Center, May 2005

Fishman, C. (2006). "The Wal-Mart Effect: Who knew shopping was so important?" *Academy of Management Perspectives*. 20(3): 6-25.

Hart, S. (2010): *capitalism at the Crossroads: Next Generation Business Strategies for Post Crisis World*, 3rd edition, FT press,

J.B. Foster, "Ecology and the transition from capitalism to socialism," *Monthly Review*, 2008

John F. Steiner and George A Steiner, *Business, Government and Society*, McGraw Hill Irwin,

Kurucz, E., B. Colbert, and D. Wheeler (2013). "Chapter 2: Envisioning a new way of doing business: Thinking skills for sustainable organizations."

Kurucz, E., B. Colbert, and D. Wheeler (2013). Section on Energy & Climate (p.107-117) from Chapter 4: "Complex global issues as the context for value creation."

Kurucz, E., B. Colbert, and D. Wheeler, (2013). Chapter 5: "Managing for stakeholders in a complex world."

M. Friedman: "The social responsibility of business is to increase its profits," *New York Times Magazine*, Sept 13, 1970

Manual G Velasquez(2010 *Business Ethics: Concepts & Cases*, sixth edition, PHI publications

P. Desrochers, "Greed Is Green: How the Profit Motive Helps the Environment," *The America*, 2013

Porter ME1, Kramer MR.Strategy and society: the link between competitive advantage and corporate social responsibility. *Harv Bus Rev*. 2006 Dec;84(12):78-92, 163.

Surf the OpenIDEO website – an open innovation platform to solve big challenges for social good: <http://www.openideo.com/>

Turner, C. (2010). How Walmart is Saving the World." *Canadian Business Magazine*, December 6, 2010.

Watch the TED talk: Tim Brown (CEO of IDEO) Urges Designers to Think Big: http://www.ted.com/talks/lang/en/tim_brown_urges_designers_to_think_big.html

302: INTERNATIONAL FINANCIAL SYSTEM

Course Objective: This course seeks to build an understanding about the international financial system. It provides insights into the drivers and implications of international capital flows and the causes of external crises, based on recent events and current policy issues. The theory presented in this course builds a strong foundation in open economy tools and concepts. The insights provided by these theoretical frameworks enable a discussion on topics such as debt crises in Latin American countries, currency crises in East Asian countries, the Global financial crisis and international monetary reform.

Syllabus:

1. Interest Rates, Exchange Rates and Inflation in an Open Economy: Open Economy Macroeconomic Identity; Relation between Fiscal Deficit, Current Account Deficit and Gap between National Savings and Investment; Balance of Payments Accounts; Exchange rate determination; Real Exchange Rates; Fixed and flexible exchange rate, Marshall-Lerner condition and J-curve; Purchasing power parity.; Covered and Uncovered Interest Parity Conditions, Real Interest Rates and Yield Curve
2. Global Capital Flows: Importance and Policy Implications; Benefits and drawbacks of unrestricted global capital flows; Global Capital Flows in Practice - capital mobility in the world economy from mid-19th century onwards. The policy Trilemma - fixed exchange rates, unrestricted capital flows and policy independence,
3. Exchange rates, External Crises and Global Capital Flows: International monetary system - Past, present and future (Gold Standard, Inter-war period and Bretton wood system); Country experiences with Fixed exchange rates and external crises: e.g., Mexican Crises, East Asian Crisis etc.
4. Analyzing economic crises: Characterizing different types of crises (e.g., Sovereign debt crisis, Currency crisis, Financial crisis) using case studies of sub-prime crisis, European debt crisis, Global Financial crisis; Inter-relations among different kinds of crises; causes of external crises; policy responses to external crises; Role of Multilateral institutions (e.g., IMF, New development Bank, Asia-infrastructure Bank, G-8 and G-20 etc.).

Readings

- IMF (International Monetary Fund) (2011), *IFS (International Financial Statistics) Yearbook*, IMF : Washington D.C.
- Krugman, P. and M. Obstfeld (2000), *International Economics : Theory and Policy*, Latest Edition, Pearson Education : New Delhi.
- Krugman, P. (2008), *The Return of Depression Economics and the Crisis of 2008*, Penguin Books : London.
- Obstfeld and Rogoff (1995), *The Mirage of Fixed Exchange Rates*, Journal of Economic Perspectives , pp. 73-96.
- Obstfeld, M. and A. Taylor (2004), *Global Capital Flows : Integration, Crisis and Growth*, Cambridge University Press : Cambridge.
- Obstfeld, M. (1998), *The Global Capital Market: Benefactor or Menace ?*, Journal of Economic Perspectives , pp: 9-30.

- Reinhart, C.M. and K.S. Rogoff (2009), *This Time is Different*, Princeton University Press : Princeton and Oxford.
- Roubini, N. and D. Backus (1998), *Lectures in Macroeconomics* (downloadable from Nouriel Roubini's, Stern School of Business, NYU, Course Website) (<http://people.stern.nyu.edu/nroubini/LNOTES.HTM>)
- Roubini, N. and B.Setser (2006) ,*Bailouts or Bail-ins ?*, Viva Books : New Delhi.

SEMESTER IV

401: CONTEMPORARY INDIAN ECONOMY

Course Objective: This course will allow the student to gain knowledge about the major developments and issues in Indian economy. Starting with the debate on growth and development in Indian economy this course discuss the sectoral balances and key issues in financial and external sectors of the economy.

Syllabus

1. **Changes in the Indian Economy:** Analysing the structure and growth performance of Indian economy since independence.
2. **Inter-sectoral balance :** Agriculture, industry and infrastructure; service sector led growth
3. **Challenges of development :** Poverty , education , unemployment , MDG (Millennium development goals) & SDG (Sustainable development goals) , Demographic dividend.
4. **Financial Sector:** Indian financial sector : its structure and reforms, Monetary Policy, Capital Market: its Growth , problems and reforms.
5. **Public Finance:**Fiscal Imbalances in the Indian Economy , Sustainability of public Debt and Fiscal Deficits in Central and State Finances.
6. **External Sector:** Analysis of trade policy in post reform period, Liberalised exchange rate system, Trend and problems of Foreign Direct Investment and Foreign Institutional investment in India, WTO and India.

Readings:

- Acharya Shankar and Rakesh Mohan (2011), *India's Economic Performance and Challenges: Essay's in Honour of Montek S Ahluwalia*, , Oxford University Press.
- Ahluwalia, I J (1985), *Industrial Growth in India*, Oxford University Press, New Delhi
- Ahluwalia, I.J. and IMD Little (2011), *India's Economic Reforms & Development :Essays in Honour of Manmohan Singh*, Oxford University Press, New Delhi
- Ahluwalia, Montek Singh (2002) *Economic reforms in India since 1991, has gradualism worked?*Journal of economic perspectives summer
- Bardhan, P. (2001) *Political economy of development in India* ,New Delhi, Oxford University Press
- Basu, K. (Ed.) (2005), *India's emerging economy*, India, Oxford University Press
- Brahmananda, P R and V R Panchmukhi (1987) *The Development Process of Indian Economy*,Himalya Publishing House, Bombay.
- Brahmananda, P R and V R Panchamukhi, (2001), *Development Experience in the Indian Economy:Inter-State Perspectives*, Bookwell, Delhi.
- Byres, T J (1998) *The Indian Economy: Major Debates Since Independence*, Oxford University Press.
- Chand, R. S SRaju and L M Pandey, (2007) *Growth crisis in agriculture* , EPW Vol. 42.
- Chandrasekhar, Ghosh and AnamitraRoychowdhury (2006), *The demographic dividend and young India's economic future* , EPW Vol 41.

- Derez, J and Amartya Sen (2002), *India Development and Participation*, Oxford University Press, New Delhi.
- Derez, J and Amartya Sen (1999), *The Amartya Sen and Jean Dreze Omnibus: Poverty and Famines, Hunger and Public Action, India- Economic Development and Social Opportunity: ... Economic Development and Social Opportunity*, Oxford University Press
- Derez, J and Amartya Sen (2013), *An Uncertain Glory: India and its Contradictions*, Princeton University Press.
- Dhar, Biswajit, (2007), *Agriculture trade and protection*, Vol 42.
- Dooley, Landau and Garber, (2005), *Asia, interest rates and the dollar*, Germany DeutscheBank
- Dua, Pami and Sinha, Arunima, (2007), *East asian currency crisis and currency pressure, the Case of India*, WP No.158. Delhi school of economics
- Feldstein, Martin (2007), *Why is the dollar so high?*, journal of policy modelling t pp661-668
- Jadhav, Narendra, (2007), *Monetary policy, financial stability and globalization*, UK Macmillan Press
- Jalan , B (2004), *The Indian Economy - Problems and Prospects*, Penguin Books
- Krishna K L and Vaidyanathan (2004), *Markets and institutions in India's economic development*, New Delhi, OUP
- Krueger, A.O(2002), *Economic Policy Reforms and the Indian Economy*, Oxford University Press, New Delhi
- Lucas, E B and G F Papanek (1988), *The Indian Economy- Recent Development and Future Prospects*, Oxford University Press, New Delhi
- Mohan, Rakesh (2004), *Challenges to monetary policy in a globalising context*, Reserve Bank of India
- Nayyar, Deepak, (2008), *Macroeconomics of structural adjustment: a heterodox perspective*, international journal of development issues. Vol 7.no 1
- Nayyar, Gaurav, (2008), *Economic growth and regional inequality in India*, EPW
- Panagariya, Arvind, (2004), *Growth and reforms during 1980s and 1990s*, EPW June 19-25
- Rodrik and Subramanian (2005), *From Hindu growth to productivity surge, the mystery of the Indian growth transition*, IMF staff papers vol 52, No 2
- Sachs, Jeffrey(2005), *The end of poverty*, UK, Penguin Press
- Sen, Partha,(2007), *Capital flows, financial repression and macroeconomic volatility In Indiasince the reforms*. WP no 157, Delhi school of economics
- Sikdar, S.(2004), *Contemporary issues in globalization* ,New Delhi, OUP
- Srinivasan, T.N. and , S. Tendulkar (2003), *Reintegrating India into the world economy*, NewDelhi, Oxford University Press.
- Takeshi I and Shigeyuki (2014) .) *Indian Economy: Empirical Analysis on Monetary and Financial Issues in India*, World Scientific Publishing Co Pte Ltd
- Economic and Political Weekly : Various Issues.
- Government of India : Economic Survey (Annual), Ministry of Finance, New Delhi

402: STRATEGIC MANAGEMENT

Course Objective: The objective of the course is to understand the top management decision making that includes formulation of vision and objectives, analysis of business environment, evaluating internal strength weaknesses, identifying competitive advantage, developing and implementing strategies, and lastly the evaluation and control. The course is case study base analysis and discussion.

Syllabus

- 1.Strategy and concepts: Strategy, strategic planning, evolution of strategy
2. Vision and strategist: vision \ mission \ strategic intent, goals and objectives
3. External environment analysis:SWOT, industry focus, strategic groups, competitors, profit pool concept and tool
4. Internal analysis: Resources,capabilities \ competence, knowledge base, use of values chain and experience curve
5. Competitive strategies and competitive advantages: Competitive advantages and strategies in different industrial settings, matured industries, blue ocean strategies values innovation, competitive advantage in high tech/emerging industry
6. Corporate strategies and portfolio analysis; Strategy for international/global industries; strategic alliances, M &A
- 7 .Disruption / Business Model Innovation; Design Thinking / Transient Advantage
8. Strategy implementation: Structure, systems, resources allocation, leadership style, balanced scorecard; Evaluation and Control, Strategic Information Systems; Strategic Entrepreneurship
- 9Strategic Change:Turnaround and corporate regeneration, managing change

Readings:

- *Besanko, D.; D.Dranove, M.Shanley, S.Schaefer, (2004): Economies of strategy, New Delhi John Wiley,*
- C.K. Pahalad, Gary Hamel, (1990)“The Core Competence of the Corporation,” *Harvard Business Review*, May-June 1990
- *Charlie Rose and David Kelley,(2013) Design Thinking: Ready for Prime Time, Harvard Business Review 2013*
- Cindy Tripp ,(2013)“Energizing Innovation Through Design Thinking,” *Rotman Management*, Fall 2013
- Clark Gilbert and Joseph L. Bower, (2002)“Disruptive Change: When Trying Harder Is Part of the Problem,” *Harvard Business Review*, May 2002
- Cynthia A. Montgomery , (2008)“Putting Leadership Back Into Strategy,” *Harvard Business Review*, January 2008
- Cynthia A. Montgomery, “How Strategists Lead,” *McKinsey Quarterly*
- David Collis and Cynthia A Montgomery,(1998) “Creating Corporate Advantage, *Harvard Business Review*, May-June 1998
- *David, Fred R.,(2004): Strategic management, India, Pearson Education*
- *Haberber, Adrian; and Alison Rieple,(2004): Strategic management-theory and application, India Oxford University Press*
- Mark W. Johnson, Clayton M. Christensen, and Henning Kagermann, (2008)“Reinventing Your Business Model,” *Harvard Business Review*, December 2008
- Michael Porter,(2008) “The Five Competitive Forces That Shape Strategy,” *Harvard Business Review*, January 2008
- Michael Porter,(1996) “What is Strategy?” *Harvard Business Review*, November-December 1996
- Mikolaj Jan Piskorski, “Choosing Corporate and Global Scope,”

- Pankaj Ghemawat , (2001)“Distance Still Matters: The Hard Reality of Global Expansion,” *Harvard Business Review*, September 2001
- Pankaj Ghemawat and Jan W. Rivkin ,“Creating Competitive Advantage,”
- Richard Rumelt, “The Perils of Bad Strategy,” by *McKinsey Quarterly*
- Robert S. Kaplan and David P. Norton, Strategic Management: An Emerging Profession,” *Balanced Scorecard Report*, 2004
- Rita Gunther McGrath, Transient Advantage,” *Harvard Business Review*, October 2004
- *Robert Grant,(1996): Contemporary Strategy analysis, UK,Blackwell*
- Robert S. Kaplan and David P. Norton, “Using the Balanced Scorecard as a Strategic Management System,” *Harvard Business Review*, July-August 2007
- Samhita Jayanti and Bharat N. Anand, “Strategies of Unrelated Diversification,”
- Tim Brown, “Design Thinking,” *Harvard Business Review*, June 2013
- W. Chan Kim and Renee Mauborgne, “Blue Ocean Strategy,” *Harvard Business Review*, October 2004
- Walter Isaacson, “The Real Leadership Lessons of Steve Jobs,” *Harvard Business Review*, April 2012
- Watch “Business Model Explained” at <http://www.youtube.com/watch?v=QoAOzMTLP5s>

OPTIONAL GROUPS

GROUP I
QUANTITATIVE
TECHNIQUES IN
BUSINESS

Gr I.1: ADVANCED ECONOMETRICS

Course objective: This course provides a good understanding about the advance topics in econometrics. Students can apply the knowledge gain from this course to pursue their own empirical research.

Syllabus

1. Qualitative Response Regression Models: Nature of qualitative response models, LPM (Linear Probability Model), Applications of LPM and its problems, Alternatives to LPM: The Logit Model and Probit Model, Extension of probit model: Tobit Model (censored regression model), Modelling count data: The poisson regression model.
2. Panel data regression Models:
Traditional panel data models: advantage of panel data, linear panel data model, Different method of Estimation : Fixed effect model and Random effect model, FEM v/s REM (Hausman test).
Dynamic Heterogeneous Panels: Bias in the simple OLS estimators, FEM and REM and its solutions, bias of heterogeneous slope parameters and its solutions, (Mean group (MG) and Pooled Mean Group (PMG))
Non stationary panels: Panel Unit root tests: Levin and Lin test(LL), ImPesaran and Shin test (IPS), Mandala and Wu test(MW); Panel cointegration tests: Kao test, McCoskey and kao test, Pedroni test , Larsson et al, test.
3. Dynamic Econometric Models: Role of lag; distributive lag model: Koyck and Almon transformation, other models of lag structure; Autoregressive models: Partial adjustment models, adaptive expectation model, estimation of autoregressive models, Testing autocorrelation in autoregressive model; Granger causality test.
4. Simultaneous Equation Models: Nature of simultaneous equations, simultaneous equation bias, identification problem and its conditions, Instrument variables, Estimation of a just identified equation: Method of Indirect least square(ILS), Estimation of a over identified equation: Method of two stage least squares(2SLS).

Readings:

Asteriou, D and Stephen Hall (2011) *Applied Econometrics*, 2nd Edition, Palgrave Macmillan.

Baltagi, B.H. (2013), *Econometric analysis of panel data* , 5th Edition New York, John Wiley and Sons Ltd.

Cameron, A. and P. Trivedi (2005), *Microeconometrics: Methods and Applications*, Cambridge Press University.

Cameron, A. and P. Trivedi (2013), *Regression analysis of count data*, 2nd Edition, Cambridge Press University.

Davidson, R. and J.MacKinnon (2004), *Econometric theory and methods*, Oxford, Oxford university press.

Hsiao, C. (2003), *Analysis of panel data*, 2nd Edition, Cambridge University Press

Maddala, G. (1983), *Limited-dependent and qualitative variables in econometrics*

Cambridge , Cambridge University Press

Wooldridge, J.M. (2010), *Econometric analysis of cross-section and panel data*,

2nd Edition, Cambridge, Mass. MIT Press.

Wooldridge, J.M. (2012), *Introductory econometrics: a modern approach*, 5th Edition, Cengage Learning.

Gr I.2: TIME SERIES AND BUSINESS FORECASTING

Course objective: The objective of this course is to provide students with an overview and in-depth knowledge of quantitative techniques used for forecasting and their application. This includes techniques that range from simple ones like moving averages and smoothing techniques to more sophisticated ones like regression models, ARIMA (and related) models, VAR and VECM models, Causality testing and ARCH and GARCH models to test volatility.

Syllabus

1. Forecasting Theory and Methods: Overview and Types of Forecasts
2. Forecasting with a Single-Equation Regression Model: Unconditional Forecasting, Forecasting with Serially Correlated Errors, Conditional Forecasting
3. Smoothing and Extrapolation of Time Series: Simple Extrapolation Models, Smoothing and Seasonal Adjustment
4. Properties of Stochastic Time Series: Characterizing Time Series: the Autocorrelation Function, Stationarity, Random Walk, Testing for Random Walks, Co-integrated Time Series
5. Linear Time Series: Moving Average Models, Autoregressive Models, Mixed Autoregressive and Moving Average Models, Homogeneous Non-Stationary Processes: ARIMA Models, Box-Jenkins Methodology, Specification of ARIMA Models, SARIMA, ARMAX Models
6. Forecasting with Time Series Models: Computing a Forecast, The Forecast Error, Properties of ARIMA Forecasts
7. Causality, Exogeneity, VAR, Impulse Response Functions, Volatility Measurement, Modeling and Forecasting: The ARCH Process, The GARCH Process

Readings

- Box, George E.P., Gwilym M. Jenkins and Gregory C. Reinsel (2009) *Time Series Analysis: Forecasting and Control* 3rdEdn. Pearson Education
- Enders, Walter (2004) *Applied Econometric Time Series*. Wiley
- Evans, Michael K. (2003). *Practical Business Forecasting*. UK: Blackwell.
- Hanke, John E. and Dean W. Wichern (2005). *Business Forecasting*. 8thEdn. New Delhi: Pearson-Prentice Hall
- Makridakis, Spyros, Steven C. Wheelwright and Rob J. Hyndman (1998). *Forecasting: Methods and Applications*. 3rdEdn. USA: John Wiley and Sons
- Pindyck, Robert S. and Daniel L. Rubinfeld. (1997). *Econometric Models and Economic Forecasts*. 3rdEdn. New York: McGraw Hill.
- Stock, James H. and Mark W. Watson (2014). *Introduction to Econometrics*. 3rdEdn. Pearson Education Addison Wesley

Gr I.3: TOPICS IN GAME THEORY

Course objective: The papers would prepare students about the cooperative and non-cooperative games which firm play as a pricing and output strategy.

Syllabus

1. Strategic games : Concepts of dominance, pure and mixed strategy Nash equilibrium
2. Extensive games : Backward induction outcomes in games with perfect information, subgame perfect equilibrium in games with imperfect information; Rubinstein bargaining solution
3. Repeated games : Nash folk theorems; finitely and infinitely repeated games
4. Static and dynamic games of incomplete information : Bayesian-Nash equilibrium, perfect Bayesian equilibrium and sequential equilibrium
5. Cooperative games: Nash bargaining solution, concepts of core, shapely value etc.

Readings

- Dixit Avinash and Susan Skeath: Games of strategy, w w Norton& company, New York. London
- Fudenberg D. and J. Tirole (1994): *Game theory*, Cambridge, Mass, MIT Press.
- Gibbons, R. (1992): *Game theory for applied economists*, Princeton, Princeton University Press
- Kreps D. (1990) : *A course in microeconomic theory*, Princeton ,Princeton University Press.
- Mas-Colell A., J. Green and M.Winston (1995): *Microeconomic theory*,U.K.Oxford University Press.
- Myerson R. (1997): *Game theory: analysis of conflict*,USA, Harvard University Press.
- Osborne M. and A. Rubinstein (1994): *A course in game theory*, Cambridge, Mass, MIT Press.
- Osborne Martin J. An Introduction to game theory, , Oxford universiy press
- Shubik M. (1982): *Game theory in the social sciences*, Cambridge, Mass: MIT Press.

Gr I.4: SIMULATION AND MODELLING IN BUSINESS MANAGEMENT

Course Objective: Decision Making is certainly the most important task of a manager and it is often a very difficult one. Most of the Business decisions are made in uncertain dynamic environment. The introduction of Simulation and Modelling as a course in business management helps in decision making under such conditions.

Syllabus

1. Introduction to Modelling & Simulation: Types of models, Continuous – Discrete, Static – Dynamic, Deterministic – Stochastic Advantages and disadvantages of simulation and modeling Steps of building a simulation model
2. Probability Distribution: Properties of Normal, Poisson, Uniform. Random number generation: Generation of pseudo random number,
3. Validation and Verification of models: Methods used for verification and validation.
4. Financial modelling and Simulation: Modelling the Financial Markets- What to model and why, Introduction to financial modelling techniques. Applications of simulation of the Financial Markets.
5. Marketing modelling and Simulation: Marketing Models and Marketing Data. Examples on modelling marketing phenomena.

Readings:

- Albright, S.C., W. L. Winston, and C. Zappe Data Analysis and Decision Making. Duxbury (1999)
- Altiook, T. and Melamed, Benjamin, Simulation Modeling and Analysis with ARENA, Elsevier: Amsterdam, 2007
- Anderson, S.P., de Palma A. and Thisse, J.-F. (1992), Discrete Choice Theory of Product Differentiation, The MIT Press.
- Banks, J. & Carson, J. S. Getting Started with GPSS/H, Wolverine Software Corp., 1989.
- Banks, J. Handbook of Simulation, Wiley Interscience, John Wiley and Sons (1998). Banks, J. (Editor), Handbook of Simulation: Principles, Methodology, Advances, Applications, and Practice,
- Bekey, G. A. & Kogan, B. Y. Modeling and simulation: theory and practice: a memorial volume for Prof. Walter J. Karplus, Springer – Verlag
- Benninga, Simon. Financial Modelling, 3rd edition, MIT Press
- Dubin, J. A. (1998), Studies in Consumer Demand – Econometric Methods Applied to Market Data, Kluwer Academic Publishers Group.
- Franses, P.H. and Paap, R. (2010), Quantitative Models in Marketing Research, Cambridge University Press.
- Laguna, M. and Marklund, J. Business Process Modeling, Simulation, and Design, Pearson Prentice Hall, 2005.
- Lilien, G. L., Philip Kotler, P. & Moorthy, K. S. Marketing Models Prentice Hall
- Winston, W. Decision Making under Uncertainty with RiskOptimizer, Palisade, 1999
- Winston, W. Financial Models using Simulation and Optimization, Palisade, 1999.
- Zeigler, B. P. Kim, T. G. & Praehofer, H. Theory of Modeling and Simulation, 2nd edition, Academic Press, Inc. Orlando, FL, USA

GROUP II
MARKETING AND
DISTRIBUTION

Gr II. 1: STRATEGIC MARKETING

Course Objective: The aim of the Strategic Marketing Management Course which builds on the 'Marketing Management' course is to provide students with: an overview of the discipline of marketing, within a corporate and functional context, an appreciation of the tools, concepts and models required to undertake an evaluation of the marketplace, an understanding of the marketing planning process and an understanding of the tools required to help develop and implement marketing strategies.

Syllabus

1. Strategic marketing management - Introduction: competitive pressures and change in market place
2. Marketing strategy and planning: Business strategy and competitive advantage, marketing audit, marketing costs and financial analysis.
3. Market and environmental analysis :Competitor analysis , customer analysis
4. Targeting and positioning strategies: Segmenting in markets ,relationship strategies, generic strategies
5. Product and Brand strategies: Planning for new products, product branding and customer service strategies, designing life cycle strategies- incorporating the psychographics perspective, managing the product/service portfolio.
6. Pricing strategy: External uncontrollable pricing forces impacting strategy, internal controllable pricing elements , understand the key strategies of perceived-value pricing and value pricing , competitive pricing matrix
7. Advertising and sales promotion strategies: Public relations and direct marketing strategies, sales force strategies
8. Distribution strategy: Channel member's roles and responsibilities, channel management decisions-designs, cooperation, conflict and power.
9. Digital Marketing , Implementation and control of Marketing etc

Readings

Cravens, David W., & Nigel Piercy (2002): Strategic Marketing, Singapore, McGraw-Hill/Irwin

Davidson, Huge; Warren J. Keegan, Elyse Arno Brill ,(2004): Offensive marketing:, an action guide to gaining competitive advantage, New Delhi, Pearson Publishers

Drummond, Graeme; John Ensor, Ruth Ashford,(2001): Strategic marketing, planning and control ,U.K. Butterworth-Heinemann,

Jain, Subash C.,(1996): Marketing planning and strategy, Texas South-Western Publisher

Nag, A., (2008): Strategic marketing, India, Macmillan Publishers

Gr II.2: MARKETING RESEARCH

Course Objective: This course is intended to introduce the student to marketing research: the effective gathering, development and use of information about markets and their component consumers and competition. It addresses the use of marketing research as an aid to making marketing decisions; specifically, how the information used to make marketing decisions is gathered and analyzed. Accordingly, Marketing Research is appropriate for both prospective users of research results and prospective marketing researchers.

Syllabus

1. Marketing research – An introduction , basic & applied research, value & limitations, overview of research process
2. Marketing information & decision support systems
3. Application of marketing research, the client / researcher interface, articulation with decision stages , information systems and marketing research
4. Research objectives & plans
5. The setting of experiments and experimental designs extension of true experimental design, selection of an experimental design
6. Measurement and scaling: Managerial considerations for measurement error avoidance, the development of measurement scaling methods, selecting the appropriate scale to use
7. Questionnaire design and function of questionnaire
8. Qualitative research: Observation and psychological measures
9. Sampling: Researcher summary of sampling selection, sampling size decisions
10. Data analysis and interpretation : Hypothesis testing (various t-tests), Investigation of associations (interdependence methods), factor analysis, ANOVA, Regression, cluster analysis, multidimensional scaling, planning requirements of efficient analysis
11. Non-parametric tests
12. Presentation of research findings
13. Cases in marketing research: Product research , advertising research marketing & sales analysis research , brand positioning and market segmentation , evaluating new marketing strategies
14. Emerging applications of marketing research : Database marketing & relationship marketing, client / researcher interface, client / researcher management concern, managing marketing research development, marketing research agencies
15. 14. Ethical issues in marketing research: Code of ethics, ethical issues involving the treatment of respondents/subjects, ethical issues in the treatment of buyers / clients, ethical issues relating to the treatment of research

Readings:

Haque, Paul (2002): *Market Research, a guide to planning, methodology and evaluation*, New York Kogan Page

Grover, Rajiv and Marco Vriens (2006): *The handbook of marketing research, uses, misuses and futures advances* New Delhi, Sage, 2006

Malhotra, N. and Dash, S. (2011): *Marketing Research*, 6th edition, Pearson Education, New Delhi, 948 p.

Nargundkar Rajendra, (2004) *Marketing Research*, New Delhi ,Tata McGraw

Smith, Scott M., and Gerald S. Albaum, (2005): *Fundamentals of marketing research*, New Delhi, Sage, 2005

Gr II.3: LOGISTICS & SUPPLY CHAIN MANAGEMENT

Course Objective: SCM is an applied paper that integrates the cross-discipline needs of marketing, finance and operations students. SCM is a key functional focus area for successful global business today. The course aims at making students appreciate the importance of SCM in international business. This would lead to:

- Understanding the nature and concepts of supply chain, its functions, differences from the conventional marketing channel approach.
- Appreciate the similarities and interaction between Purchasing, Distribution and Supply Chain systems.
- Learn the function and role of Warehousing and Unitization.
- Knowledge related of international conventions, legal requirements and practices related to movement of goods across the Globe.
- Create capability to analyze, design and improve the supply chain in an organization.

Syllabus

- Understanding SCM - basics and concepts.
- Economic justification of SCM and risks involved.
- Warehousing – types, layouts, order picking, packaging and unitization.
- Transportation – choices, considerations, inter-modal and documentation.
- International Conventions – legal aspects, international practices, chartering principles and documentation, maritime insurance and frauds.
- Role of technology in SCM – IT, e-business, ERP etc.
- Contemporary developments – 3 PL/4 PL, reverse logistics and other practices.

Reading:

Text book

Chopra, Sunil and Meindl, Peter – “Supply Chain Management”, Pearson Education, 2004.

References:

- Ayers, James B – “Handbook of Supply Chain Management”, St. Lucie Press, 2000.
- Blanchard, Benjamin S – “Logistics Integrated Inventory Management”, John Wiley & Sons, 1999.
- Blanchard, Benjamin S – “Logistics Engineering and Management”, Pearson Education, 2001.
- Ballou, Ronald H – “Business Logistic Management”, Prentice-Hall, 1999.
- Branch, Alan – “International Purchasing and Management”, Thomson Learning, 2002.
- Chadwick, Tom and Rajgopal, Shan – “Strategic Supply Management”, Butterworth Heinmann, 1995.
- Christopher, Martin – “Logistics and Supply Chain Management”, Pitman Publishing, 1998.
- Copacino, W C – “Supply Chain Management”, St. Lucie Press, 1996.
- Coyle, John J; Bardi, Edward J and Langley Jr., C John – “The Management of Business Logistics”, West Publishing Company, 1996.
- David, Pierre – “International Logistics”, Biztantra, 2003.

- *Dobler, W Donald and Burt, David N – “Purchasing and Supply Management”, Tata McGraw-Hill, 1999.*
- *Fernie, John and Sparks, Leigh – “Logistics and Retail Management”, Kogan Page, 1998.*
- *Gattorna, John – “Strategic Supply Chain Alignment”, Gower Publishing, 1998.*
- *Gourdin, Kent N – “Global Logistics Management”, Blackwell Publishers, 2001.*
- *Handfield, Robert B and Nicholas, Jr. Ernest L – “Introduction to Supply Chain Management”, Prentice-Hall, 1999.*
- *Lambert, Douglas M; Stock, James R and Ellram, Lisa M – “Fundamentals of Logistics Management”, Irwin McGraw-Hill, 1998.*
- *Mentzer, John T – “Supply Chain Management”, Response Books, 2001.*
- *Monczka, Robert; Trent, Robert and Handfield, Robert – “Puchasing and Supply Chain Management”, Thomson South-Western, 2002.*
- *Rushton, Alan; Oxley, John and Croucher, Phil – “The Handbook of Logistics and Distribution Management”, Kogan Page, 2000.*
- *Sahay, B S – “Supply Chain Management”, Macmillan India, 1999.*
- *Shapiro, Jeremy F – “Modelling the Supply Chain”, Thomson Learning, 2002.*
- *Schonsleben, Paul – “Integral Logistics Management”, The St. Lucie Press, 2000.*
- *Walters, D W and Gattorna, J L – “Managung the Supply Chain”, Macmillan Business, 1996.*
- *Waters, Donald – “Global Logistics and Distribution Planning”, Kogan Page, 2003.*
- *Wisner, D Joel; Leong G Keong and Tan Keah-Choon – “Principles of Supply Chain Management”, Thomson South-Western, 2005.*

Gr II.4: INTERNATIONAL MARKETING

Course Objective: This course will equip students with the tools and terminology to explore and understand marketing practices in a global environment. It provides a practical overview of the key elements of international marketing and issues businesses face when entering and operating in foreign markets. This course is designed to provide students with the latest understanding of global issues, disciplines, competitions and the necessary skills in making strategic decisions based on a global perspective.

Syllabus

1. International Marketing: Concept and relevance
2. Internationalization process
3. Environment analysis: Dynamics of global market environment/international competition, cultural dynamics in assessing global markets- geography, history and culture ,political and legal environment- need critical evaluation- WTO and its various provisions
4. Developing global vision through market research :Export market selection- definition and strategy, market definition and segmentations and strategy , market expansion , selection process, procedures, strategy ,foreign market portfolios ,sources of information, assessing market potential ,export marketing research, using internet e-mail for data collections
5. International marketing strategy/global strategy: Competitive advantage and value chain
6. Entry modes and strategy
7. Exports :Exim policy in India, financing sources, marketing risks, institutional framework
8. Strategic alliance
9. Creating products for consumers in global markets
10. International pricing
11. International distribution systems
12. International advertising and promotion
13. E-business and its role in international marketing
14. Implementing global market strategy/international marketing negotiations

Readings:

Douglas Lamont, (1997): *Winning worldwide*, John Wiley and sons
Joshi, Rakesh Mohan,(latest edition): *International Marketing*, New Delhi, Oxford University Press
Masaaki Kotabe and KristiaanHelsen, (2009): *Global marketing management*, India, John Wiley
Philip R. Cateora and John L. Graham, (2006): *International marketing*, Singapore, McGraw-Hill/Irwin
Rajagopal, (2007): *International marketing*, New Delhi; Vikas Publishers
Warren Keegan,(2004):, *Global marketing, India*, Pearson Education

Gr II.5: CUSTOMER RELATIONSHIP MANAGEMENT

Course Objective: This course defines CRM as the core business strategy that integrates internal processes and functions and external networks to create and deliver value to targeted customers at a profit.

Syllabus

1. Introduction to CRM, evolution of the concept, changing role of CRM, Influence of Globalization on CRM
2. CRM process
3. Customer equity and its components: Brand equity, value equity and relationship equity
4. Economics of CRM: Customer life time value, customer life cycle analysis
5. Strategic CRM in B-to-C
CRM implementation in B-to-B
6. Customer Loyalty and Loyalty programs
Lasting relationship through service offerings
7. CRM in fast moving consumer goods
8. Customer Profitability Analysis, Satisfaction Profit Chain
9. Allocating Resources to customers
10. Critical success factors and Obstacles in CRM Success
11. e-CRM

Readings:

Blattberg, Roberts, Garg Gets and Jacqueline. S. Thomas *Customer Equity: Building and Managing Relationship as Valuable Assets*, Boston, Harvard Business School Press.

Buttle Francis, *Customer Relations Management: Concepts and Tools*, Amsterdam, Elsevier

Greenberg Paul, *CRM at speed of light: Social CRM Strategies. Tools and Techniques for engaging your customers*, McGraw Hill.

Pealeu (ed.) *Customer Relations Management*, Prentice hall

Swift, Ronelt, Acceleratily *Customer Relationship using CRM and Relationship Techniques*. Upper Saddle River, N.J. Prentice hall

GROUP III

BUSINESS FINANCE

GR III.1: FINANCIAL DERIVATIVES

Course Objective: The objective of this course is to give an overview of the fundamentals of financial derivatives. This course introduces financial derivatives, such as forwards, futures, swaps, and options. Application of these derivatives instruments in managing risk management, besides their pricing / valuation issues would also be explored.

Syllabus

1. **Introduction to Financial Derivatives:** Forward Contracts; Futures Contracts; Options & Other Derivatives – Meaning & Differences, Profit & Pay-offs from derivatives; Types of traders; Uses of Derivatives; Role of Derivatives; Criticism of Derivative contracts; Overview of Indian Derivatives market.
2. **Mechanics of Futures Market:** Transactions on a Futures Exchange; Specifications of a Futures Contracts; Operation of Margins; Convergence of Futures price to Spot Price; Safeguards in Futures Market; Role of Clearing House, Operation of Margins; Closing of a Futures position; Open Interest.
3. **Determination of Forward/Futures prices:** Investment vs. Consumption assets; Short selling; Determination of Forward prices - Cash-and Carry & Reverse Cash & Carry Arbitrage; Value of Forward Contracts; Forward and Futures Price; Futures price for Currencies & Consumption assets; Convenience yield; Implied repo rate.
4. **Hedging Strategies using Futures:** Uses of Futures contracts; Hedging – Long and Short Hedge, Choice of Futures contract, No. of Futures contracts – Hedge Ratio; Hedge effectiveness; Basis Risk; Cross hedging; Hedging with Index Futures; Changing the portfolio beta using Futures; Rolling the hedge forward.
5. **Mechanics of Options:** Specifications of Options Contracts; Moneyness of Options; Types of options; Trading & Settlement; Adjustments for Corporate actions.
6. **Properties of Stock Options:** Factors affecting Option prices; Upper & Lower Bounds of Option prices; Early exercise of American options; Put-Call parity & its uses.
7. **Valuing Options:** Binomial Option Pricing Model, one-step, two step binomial trees for Call & Put options; Risk-neutral valuation vs. Real world; Black-Scholes-Merton Option Pricing Model (BSMOPM); Assumptions; Log-normal property of stock prices; Interpretation of the formula; Robustness of BSMOPM; Effect of Dividends; Early exercising of American Options; Estimating Volatility - Historical Volatility & Implied Volatility; Volatility skew & smiles, Effect of Dividends.
8. **The Greeks:** Delta, Gamma, Theta, Vega, and Rho - Meaning, Properties and Uses.
9. **Trading Strategies using Options:** Strategies involving option & stock – Covered Call & Protective put; Spreads – Bullish, Bearish, Butterfly; Combinations – Straddles, Strangles, Strips & Straps; Other Strategies – Collars, Box Spread, Ratio Spread, Condors; Synthetic Stocks.
10. **Swaps:** Concepts; Types of Swaps- Interest rate & Currency Swaps - Structure, Pricing and Valuation.
11. **Value-at-Risk:** Firm Risk Management; Managing market risk; Concept of VaR; Calculating VaR; Benefits & Criticism of VaR.

Readings

- Chance, Don M. and Robert Brooks, (2013), *An Introduction to Derivatives and Risk Management*, Cengage Learning.
- Dubofsky, David A., and Thomas W. Miller,(2003), *Derivatives – Valuation & Risk Management*, Oxford University Press.
- Hull, John C. &SankarshanBasu,(2012) *Options, Futures, and Other Derivatives*, Pearson Education.
- Kolb, Robert W. and James A. Overdahl, (2009), *Futures, Options & Swaps*, Wiley India.

Gr III .2: INVESTMENT AND PORTFOLIO THEORY AND MANAGEMENT

Course Objective: The Course is aimed at equipping the students with necessary knowledge, tools and skills to evaluate securities, their risk and return characteristics, make suitable portfolios and to evaluate their performance. The course is also designed to give necessary exposure of working of investment markets.

Syllabus

1. An overview of investment- Investment process, Investment options, Types of investors, Concept of Risk & Return, Concept of Asset
2. Market, Instruments & Security Trading -Short selling, leverage and arbitrage, How Securities are traded, Markets and Trading: Trading orders, Asset Classes, Securities Market
3. Fixed income securities -Calculating Future Bond Prices, Rates of Return on Bond, Computing Bond Yield, Bond Characteristics, yield curve, term structure of interest rates, bond behavior , duration and modified duration, bond convexity, immunization and other bond management strategies, rebalancing of portfolios
4. Fundamental Analysis -Bottom up investing: Value approach and growth approach, Top-down investing (The E-I-C Analysis framework)
5. Company Analysis- Cash flow based valuation - Discounted cash flow analysis Estimation of cost of capital, Relative valuation metrics and investment decision, Valuation multiples (P/E, Price to Book Value , EV/EBITDA, Price to sales)
6. Market Efficiency -The random walk model, weak, semi strong and strong forms of market efficiency, event studies & calendar effects
7. Technical Analysis- Conceptual Foundation, Theoretical Basis of technical analysis, Charting, Technical Indicators Patterns
8. Capital Market Theory -Arbitrage Pricing Theory, Capital Asset Pricing Model
9. Portfolio Construction- Need for Portfolio Construction, Asset Classes and their impact on portfolio
10. Portfolio Construction -Asset Classes and their impact on portfolio, Need for Portfolio Construction
11. Theory of Portfolio Construction -Portfolio Construction Process, Determine the efficient frontier, Markowitz Portfolio Selection Model
12. Portfolio performance measurement & revision - Sharpe portfolio performance measure, Jensen portfolio performance measure, Treynor portfolio performance measure , Portfolio revision, Fama's model, information and m^2 ratios, market timing and shifting strategies of a manager, style analysis.

Readings:

- Bodie, Zvi , Alex Kane, Alan J Marcus & Pitabas Mohanty (2009), *Investments*, Tata McGraw Hill.
- Fischer, Donald E. and Ronald J. Jordan, (2006), *Security Analysis and Portfolio Management*, Pearson Education.
- Reilly, F. and J. Brown, (2006) *Investment Analysis and Portfolio Management*, Cengage Learning.

GR III .3 CORPORATE RESTRUCTURING, MERGERS & ACQUISITIONS

Course Objective: This course exposes the students to a broad range of financial restructuring techniques by which corporates re-aligning and restructure their businesses in order to increase firm value.

Syllabus

- 1. Basic Concepts:** Corporate Restructuring, Mergers, Amalgamations, Acquisitions, Takeovers, Divestures, De-mergers, Sell-Offs, Spin-Offs, Equity Carve-outs, Strategic Alliances, Joint Ventures – Definitions, Differences & Similarities; Types & motives for Mergers; Recent Trends.
- 2. Theories of Mergers:** Efficiency theory, Operating Synergy, Pure Diversification, Information and Signaling, Hubris Hypothesis, Free Cash flow Hypothesis.
- 3. Regulatory Environment & Compliance in India:** Legal Processes in M &A; SEBI Takeover Code 2011 and regulatory guidelines; Relevant Provisions of Companies Act-2013, Income Tax Act and Competition Act-2002.
- 4. Valuation of Target Firms:** Book Value Method, Discounted Cash Flow Methods – DCF, FCFE, FCF, Cost of Capital & Adjusted Present Value(APV) method; Dividend Discount Method, Relative Valuation Method – Earnings, Revenue, Sector-specific, Book Value Multiples, Equity & Enterprise Valuation Multiples; Real Options Method.
- 5. Financing of Acquisitions:** Method of Payment, Earnings Dilution in Share Exchange, Financing a Cash Offer, Deferred Consideration.
- 6. Accounting for Mergers & Acquisitions:** Pooling of Interest & Purchase Method – Features. Pros & Cons; Tax implications in M & A.
- 7. Buyback of Shares:** Concept; Methods of buyback – Tender offer, Open Market Purchase, Reverse Book-building method; Pros and Cons; SEBI Regulations; Empirical evidence on buybacks.
- 8. Leveraged Buyouts::** Rationale for LBOs, Structure of LBOs, Earnings and Cash flow forecasts; Debt Structure and “cash-sweep-in”, Cashing-out Horizon and Terminal Value; Target IRR, & Backward induction; Computing returns to Investors, Debt Capacity and Affordable price.
- 9. Delisting of Equity Shares:** Rationale, SEBI Regulations on delisting, Procedure for delisting, Compulsory & Voluntary delisting.
- 10. Employee Stock Option Scheme:** Meaning, Types of ESOPs, and Regulatory Environment in India.
- 11. Brand Valuation:** Meaning, Rationale, Different Methods of Brand Valuation – Relief from Royalty; Excess Value Approach, Interbrand Approach.

Readings:

Arzac Enrique R., (2008), Valuation for Mergers, Buyouts and Restructuring, Wiley.

Damodaran Aswath, (2010), Damodaran on Valuation, Wiley India.

DePamphilis, Donald M. (2010), Mergers, Acquisitions, and Other Restructuring Activities, Elsevier.

Gaughan, Patrick A. (2011), Mergers, Acquisitions, and Corporate Restructuring, Wiley India.

Godbole, Prasad G. (2014) Mergers, Acquisitions and Corporate Restructuring, Vikas Publishing House (P) Ltd.

Koller, Tim Marc Goedhart, & David Wessels, (2005), Valuation: Measuring & Managing the value of Companies, John Wiley & Sons, Inc.

Weston, J. Fred, Mark L. Mitchell, J. Harold Mulherin, & Prashant Salwan, (2011) Takeovers, Restructuring and Corporate Governance, Pearson.

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Gr III.4: CREDIT AND RISK MANAGEMENT

Course Objective: The objective of this course is to develop an integrated approach to measuring and managing all risks directed towards value maximization. The course lays emphasis on specific risks of businesses and apprises with the emerging technologies in current business environment.

Syllabus

1. Risks of financial intermediation: Interest rate risk, market risk, credit risk, off balance sheet risk, technology and operational risk, foreign exchange risk, sovereign risk, liquidity risk, reputation risk, legal risk and other risks.
2. Interest rate risk: The maturity model, the duration model, the repricing model.
3. Market risk: Measurement, fixed income securities, foreign exchange, equities and portfolio aggregation
4. Credit risk: individual loan risk, loan portfolio risk, The Credit Process, Credit Selection, Application of Credit Risk Measurement, Objectives of Credit Portfolio, Credit Risk Loss Distribution, Credit Rating Systems, Prediction of default and estimating credit default probability using multiple discriminate analysis and other methods; Credit risk management and credit scoring models
5. Off balance sheet activities: Loan commitments, commercial letter of credit, derivative contracts, loans sold
6. Operating cost and technology risk: Technological innovation and profitability, testing for economies of scale and economies of scope, risks in payment system
7. Foreign exchange risk and sovereign risk.
8. Liquidity risk: bank runs and deposit insurance
9. Bank capital requirement under Basel I, Basel II and Basel III.

Readings

- Philippe Jorion, (2010), *Financial Risk Manager Handbook*, Wiley India.
- Rejda George E.(2011), *Principles of Risk Management and Insurance*, Pearson Education New Delhi.
- Chatterjee, DP (2011), *Risk Management- An overview*, Macmillan India Ltd
- Bessis, Joel, (2009), *Risk Management in Banking*, Wiley India.
- Hull, John C., SankarshanBasu, (2010), *Options, Futures and Other Derivatives*, Pearson Education, New Delhi
- Stulz, R., (2007) *Risk Management and Derivatives*, Cengage Learning.

GROUP IV
ECONOMICS

Gr IV.1: URBAN TRANSPORT ECONOMICS

Course Objective: The objective of this course is to make students aware about structure and growth of cities in an economy. It also highlights the need and importance of urban transport.

Syllabus

1. Introduction: Development of cities ,Alfred Weber's theory of industrial location, theory of agglomerations, functions and economic interest of transport, characteristics, transport and economic development ,transport and urban development.
2. The Internal Structure of Cities: The monocentric model of the city, Urban hierarchies and central place theory, the contemporary city and suburbanization sprawl, economics of housing markets, land use patterns and controls
3. Urban Poverty: The role of space, policy responses
4. Overview of local government
5. Growth of cities in India, looking to the future
6. Economic analysis transport : Economic theory, transport as an economic activity, cost of transport, pricing of transport services, law of diminishing returns and economics of scale, transport policy and development in a changing environment, assessment of present and proposed transport policy and legislation, environment cost of transport, transport regulation
7. Road freight transport
8. Road passenger transport :Introduction to passenger transport, macro and micro passenger transport

Readings:

- Andrew C. K. (1993) :Why regions grow: a review of research on the economic base model, Federal Reserve Bank of Atlanta economic review, 16-29.
- Berube A. and Forman B. (2002) :Living on the Edge, decentralization within cities in the 1990s, the living cities census series, The Brookings Institution (October 2002)
- Button K.J. (1976) :The use of economics in urban travel demand modeling, a survey, socio-economic planning sciences, 10(2) : 57-66
- Button K.J.(1993) :Transport Economics, UK, Edward Elgar
- Button, K.J. and Pearman A. (1985) :Applied transport economics: a practical case study approach, London, Gordon and Breach
- Coulson, N.E. (1991): Really useful tests of the monocentric model land economics, Land economics, 67(3), 299-307.
- Ellen, I. G. and Schwartz, A.E.(2000):No easy answers: cautionary notes for competitive cities, The Brookings, review, 18(3), 43-45
- Glaeser, Edward L.(1998) Are cities dying? Journal of economic perspectives, 12(1), 139-160.
- Jose G.-I., Tye W.B., Winston C. (1999): Essays in transportation economics and policy, a handbook in honor of John R. Meyer, Washington D.C, The Brookings Institution Press
- Kenneth A. S. (1993) Urban traffic congestion, a new approach to the gordian knot, the Brookings review, 11(2), 6-11.
- McLean, M. L., and Voytek K.P. (1992) :Understanding your economy, using analysis to guide local strategic planning, 2nd ed, Chicago, Planners Press
- Mieszkowski, P., and Mills, E.S. (1993): The causes of metropolitan suburbanization, Journal of economic perspectives, 7(1), 135-147.
- Molly O'Meara S. (2002): What will it take to halt sprawl, world watch, 15(1), 12-23.
- Naik N.T.K and Mansoor S. R. (2007): Urbanisation of India. New Delhi, Eastern Book Corporation.
- O' Sullivan, A. (2003) : Urban economics, Boston, MA, Irwin McGraw-Hill

Peiser R.B. (1989): Density and urban sprawl, *Land economics* , 65(3), 193-204.

Peter G. and Richardson H. (1989): Notes from the underground: the failure of urban mass transit, *The public interest*, 94, 77-86

Porter M.E. (1998): Clusters and the new economic competition, *Harvard business review*, 76 (6), 77-90

Singh S. K. (2000): [Technical characteristics and efficiency of the Indian state road transport undertakings](#)?, *Indian journal of transport management*, 24(8): 533-543.

Singh S. K. (2005): Review of urban transportation in India? [Journal of public transportation](#), 8(1): 79-97

Sivaramakrishnan, K.C., Kundu A. and Singh B.N. (2005): *Handbook of urbanization in India*. New Delhi: Oxford University Press

Timothy J. B. (1994): Jobs, productivity, and local economic development: what implications does economic research have for the role of government? *national tax Journal* , 47(4), 847-862.

Timothy J. B. et al (1987) : Saturn and state economic development, *forum for applied research and public policy*, 2 (1), 29- 40

GR IV.2: ENERGY ECONOMICS

Course Objective: The objective of the course is to develop an understanding about the energy sector of the economy. The students are to find out about the sources of energy, their pricing and the linkages with environment.

Syllabus

1. Introduction, Energy demand: short run and long run price and income elasticities
2. Energy supply and the economics of depletable resources
3. World oil markets and energy security
4. Natural gas price and regulation, deregulation and markets
5. Current Electricity Policies, and programmes
6. Risk management, futures markets and derivatives
7. Energy and climate change
8. Internalizing environmental externalities with a focus on Co2 emissions cap and trade mechanisms
9. Analysis of energy sources: Coal , nuclear power
10. Energy efficiency policies and programme
11. Renewable energy policies and programme
12. Trading in energy markets

Readings:

- Barsky, R., and L. Killian,. (2004): Oil and the macroeconomy since the 1970 journal of economic perspectives 18, no. 4: 115-134.
- Borenstein, S. (2005): The long run efficiency of real-time electricity pricing, the energy journal 26, no. 3: 93-116.
- Considine, T. (2006): Is the strategic petroleum reserve our ace in the hole?" the energy journal 27, no. 3: 91-112.
- Cuddington, J., and Z. Wang. (2006): Assessing the degree of spot market integration for u.s. natural gas, evidence from daily price data., journal of regulatory economics 29: 195-210
- Deffeyes, K. ,Hubbert's Peak, (2001):: The impending world of oil shortage. Princeton, NJ, Princeton University Press, chapter 1.
- Energy Information Administration. (2002): *Derivatives in risk management for petroleum, gas and electricity*.
- Flynn, E. (2000): *Impact of technological change and productivity on the coal market*, energy information administration, issues in midterm analysis and forecasting.
- Hassett, K. and G. Metcal , (1993): Energy conservation investment, do consumers discount the future correctly? Energy policy (June): 710-716.
- Heal, G. (1993): The optimal use of exhaustible resources, ch 18 in handbook of natural resource and energy economics. Vol. 3. Edited by A. Kneese and J. Sweeney. San Diego, CA: Elsevier Science Publishers.
- Herce, M., J. Parsons, and R. Ready. (2006): Using futures prices to filter short-term volatility and recover a latent, long-term price series for oil, MIT center for energy and environmental policy research working paper 06-005 (April).
- Hughes, J., C. Knittel, and D. Sperling. (2006): Evidence of a shift in the short-run price elasticity of gasoline demand, center for the study of energy markets, working paper 159.

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Krautkraemer J., and M. Toman. (2003): Fundamental economics of depletable energy supply, resources for the future, discussion Paper 03-01.

Leitzinger, J., and M. Collette. (2002): A retrospective look at wholesale gas, industry restructuring, journal of regulatory economics 21, no. 1: 79-101.

Massachusetts institute of technology, (2003): **The future of nuclear power, an interdisciplinary MIT study**

McDonlad, S., S. Robinson, and K. Thierfelder.(2006:) Impact of switching production to bioenergy crops, the switchgrass example, energy economics 28: 243-265.

McGowan, J., and S. Conners. (2000:) Windpower, A turn of the century review ,annual review of energy and the environment 25: 147-197.

Nordhaus, W. (2006): After Kyoto alternative mechanisms to control global warming American economics association papers and proceedings 96, no. 2: 31-34.

Nordhaus, W. D. (2006): The stern review on the economics of climate change mimeo.

Palmer, K., and D. Bullaw., (2005): Cost-effectiveness of renewable electricity policies, energy economics 27: 873-894.

Pizer, M. (2006): The evolution of a global climate change agreement, American economics association papers and proceedings 96, no. 2: 26-30.

Portney, P., and I. Parry, (2003): Policy watch, the economics of fuel economy standards, journal of economic perspectives 17, no. 4: 203-217.

Slade, M., C. Kolstad, and R. Weiner.(1993): Buying energy and nonfuel minerals ch 20 in handbook of natural resource and energy economics. Vol. 3. edited by A. Kneese and J. Sweeney. San Diego, CA, Elsevier Science Publishers

Smil, V. (2000): Energy in the twentieth century, resources conversions, costs, uses and consequences annual review of energy and the Environment 25: 21-51.

Smith, J. (2005): Inscrutable OPEC? behavioral tests of the cartel hypothesis, The energy journal 25, no. 1: 51-82.

Gr IV.3: INFRASTRUCTURE ECONOMICS

Course Objective: The paper provides a theoretical background about the need for regulation in the sector. It would expose students to different infrastructure related policies and the role of these in its growth.

Syllabus

1. Introduction: Theory of natural monopoly, financing of public services, private vs. public sector financing, debate about the fixation of prices of social services, development of social services in the successive Indian plans, regulation, competition and privatization, the role and effectiveness of the regulator in controlling monopoly behaviour
2. Rail transport: Analysis of the market, legal requirements and policy, railway characteristics and ownership, containerization, regional rail cooperation, international railway trends, railway pricing, pipelines.
3. Air transport :Development of the Indian air transport industry, overview of current air transport policies, the roles and responsibilities of national and international control bodies, cost and pricing air transport services, airline management and control .Airport planning and management.
4. Water supply: Water utilities, urban and rural water supply
5. Telecommunication:Telecom reforms in India with a critique of national telecom policy 1994 and 1999, the Relationship between TRAI, Department of telecom, and public and private operators, Role of telecom infrastructure in meeting needs of the economy and the IT sector.

Readings:

- Anandalingam G. (1996) :Technological progress, industry dynamics and telecommunications policy: the need for further reforms in India, working paper No.83, IIM, Bangalore,.
- Athreya M.B. (1996): India's telecommunication policy, telecommunication policy, 20(1): 11-22
- Chaudhuri M.D. (1990): Market failure and government failure, Journal of Economic Perspectives, 4(3), 25-39
- Crew M.A. and Kleindorfer P.R. (1979) : Public utility economics, London, Macmillan
- Goodman J.B. and Loveman G.W. (1991): Does privatization serve the public interest, Harvard business review, 69(6): 26-38
- Mody A.(1997): Infrastructure strategies in east Asia, the untold story, Washington, D.C: economic development institute, world bank
- National Council of Applied Economic Research (1996): India infrastructure report: policy implications for growth and welfare, New Delhi , NCAER
- Navarro, P. (1996): Electric utilities, the argument for radical deregulation,Harvard business review, 73(1): 112-25
- Parikh, K.S. (Ed.) (1999): India development report - 1999-2000, New Delhi: Oxford
- Sherman R. (1983): Is public utility regulation beyond hope? inA.L.Danielsen and D.R.Kamarschen (ed.), current issues in public utility economics, Lexington, MA.
- Sinha N. (1996): The political economy of India's telecom reforms, telecommunication policy, 20(1) : 23-38
- Smith P.L. and Staple G (1994): Telecommunication sector reforms in Asia: towards a new paradigm, World Bank discussion paper 232, World Bank,Washington D.C.
- The economist (1996): The Hidden cost of red tape, 27th July 1996

Relevant websites of different ministries of the Government of India, summary of consultants reports in UP, Haryana, and Karnataka electricity board restructuring

Gr IV.4: AGRICULTURAL ECONOMICS

Course Objective:The focus of this course is to introduce students to the importance of agricultural sector and to the issues associated with agricultural transformation, agricultural production, and demand of and supply for agricultural commodities. The objective is to equip students to analyze and critically assess issues, policies and programmes in these areas with particular emphasis on Indian agriculture.

Syllabus

1. **Nature and scope:** Nature and Scope of economics of agriculture, inter -sectoral linkages of agriculture (backward and forward linkages and feedback effect).
2. **Role of agriculture in economic Development:**The contribution of agriculture to economic development. Historic perspective (experience of developed and developing countries); Declining role of agriculture and dilemmas of development.
3. **Agricultural Production Function:**Agricultural production function; uniqueness and types of agricultural production function; Cobb-Douglas and CES production function
4. **Theories of agricultural transformation:**Schultz theory of transformation of traditional agriculture, Mellors theory of agricultural development, Hayami- Ruttan innovation model of economic development. Nature and types of Risk and uncertainty in agriculture.
5. **Growth pattern of Indian agriculture:** Growth Pattern of Indian Agriculture since 1950. Deceleration in the 1990s – Extent and Causes. Regional Imbalances in Indian Agriculture. The issue of productivity in Indian agriculture, Food Security - Problem and Policy Options. WTO and Indian agriculture.

Readings :

- Besley, Timothy (1994), *How Do Market Failures Justify Interventions in Rural Credit Markets?*, The World Bank Research Observer, Vol. 9, No.1
- Bruce L. Gardener and Gordon C. Rausser (2002), *Handbook of Agricultural Economics Vol.1 A : Agricultural Production*, Amsterdam, Elsevier Science B.V.
- Bruce L. Gardener and Gordon C. Rausser (2002), *Handbook of Agricultural Economics Vol.1 B : Marketing, Distribution and Consumption*, Amsterdam, Elsevier Science B.V.
- Bruce L. Gardener and Gordon C. Rausser (2002), *Handbook of Agricultural Economics Vol.2 A : Agricultural and Its External Linkages*, Amsterdam, Elsevier Science B.V.
- Bruce L. Gardener and Gordon C. Rausser (2002), *Handbook of Agricultural Economics Vol. 2 B : Agricultural and Policy*, Amsterdam, Elsevier Science B.V., 2002
- Ghatak Subrata and Ken Ingersent (1984) *Agriculture and Economic Development*, Harvester Press Ltd., London.
- Government of India : National Agricultural Policy, Ministry of Agriculture, Government of India, New Delhi. (Latest).
- Hoff Karla and Joseph E. Stiglitz (1990), *Introduction : Imperfect Information and Rural Credit Markets – Puzzles and Policy Perspective*, The World Bank Economic Review, Vol.4, No.3
- World Bank (2006), *Rejuvenating Indian Agriculture*, Washington, World Bank.
- Various issues of Economic and Political Weekly of India (EPW), and Indian Journal of Agricultural Economics (IJAE)
- Kapila, Uma (2007), *Indian Economy Since Independence*, Academic Foundations, New Delhi.
- Kapila, Uma (2007), *Indian Economy – Performance and Policies*, Academic Foundation, New Delhi.
- Balla, G.S. (1997). Indian agriculture since independence.

Gr IV.5: ECONOMICS OF HEALTH AND EDUCATION

Course Objective: The course is designed to expose students to two key social and economic issues being faced by the Indian Economy today.

Syllabus

1. Health: Economic dimensions of health care - demand and supply of health care, Grossman's model of health care services, determinants of health - poverty, malnutrition, illiteracy and lack of information, Micro effects of health, health dimensions of macroeconomics development; health policy, financing of health care and resource constraints, inequalities in health - class and gender perspectives, institutional issues in health care delivery, economics of health insurance, community based health insurance.
2. Economics of education: Micro theories of education , Becker's theory, Mincerian equation, over education, measuring micro effects of education, signaling theory of education, new growth theories and macro-economic effects of education, human resources and human capital development empirical evidence government policies, government funding and issues, PPP in education. the case for universal, free, primary education, structure of higher education and problems of its financing in India , other issues in education policy

Readings

Government of India (2005): Report on the CABE committee on autonomy of higher education institutions, ministry of human resource development.

Becker, G.S. (1962): Investment in human capital, a theoretical analysis, Journal of political economy, 70(5) : 9-49

Spence, M. (1973): Job Market signaling, Quarterly journal of economics, 87(3), 355-374

Christian B. (2006): The return to schooling in structural dynamic models:,a survey of the literature, working paper, Institute for the study of labor

Duraisamy (2000): Changes in return to education in India, 1983-94y Gender, Age-cohort and Location, Center discussion paper no. 815, economic growth center, YaleUniversity

Devadasn N. ,Rasnon K. (2004): Community health insurance in India , an overview,Economic and political weekly

Tompa, E (2002): [The impact of health on productivity: macro and microeconomic evidence and policy implications, the review of economic performance and social progress](#), in: Andrew Sharpe, & Keith Banting, Di (ed.), the review of economic performance and social progress volume 2

Grossman, M. (1972): On the concept of health capital and the demand for health,The Journal of political economy, 80 (2) 223-255

Guptal. (2003): Inequities in health and health care in India, Can the poor hope for a respite? discussion paper Institute of economic growth, institute of economic ,New Delhi

Ahuja, R. (2004): Health insurance for the poor in India, working paper, New Delhi, ICRIER

Grossman (1999) : The human capital model of the demand for health, working paper 7078USA, NBER,

India infrastructure report (2008): Business models of the future, India,India OUP

GR IV.6: ECONOMICS OF CLIMATE CHANGE

Course Objective: The objective of this course is to give students an insight into the link between microeconomic theory and climate change and make them aware of international co-operation and climate policy.

Syllabus

1. Introduction to Climate Change: Greenhouse Effect, The Carbon Cycle, Basic Facts on Emissions, Climate Change Observation, Climate Change Predictions, Climate Change Impacts
2. Efficiency, Public Goods, Externalities: A brief review (preferences, utility, rates of substitution, efficiency, equilibrium, welfare theorems), Market Failure Public Goods and Externalities
3. Environmental Policy Instruments: Introduction on Instrument Choice, Bargaining, Standards and Taxes, Cap and Trade, Cap and Trade vs Taxes, Cap and Trade in application—EU ETS, US
4. Discounting: cost benefit analysis, market vs social discount rate, determinants, normative vs descriptive, hyperbolic discounting
5. Risk and Uncertainty: Risk, Expected Value, Risk Aversion, Classification of Uncertainty, Willingness to Pay for risk reduction, learning option value, optimal mitigation levels under anticipated learning, precautionary principle, Uncertainty and discounting
6. Integrated Assessment: Integrated Assessment of Climate Change, Building an Integrated Assessment Model
7. International Co-operation and Climate Policy: International Environmental Agreements, Co-operative and non-co-operative abatement, Free-riding, Cartel formation, Multiple coalitions, International Climate Policy

Readings:

Hahn, Robert W. and Alastair Ulph (Eds.) (2012) *Climate Change and Common Sense, Essays in Honor of Tom Schelling*. OUP

Hansjürgens, Bernd, and Antes, Ralf (Eds.) (2008) *Economics and Management of Climate Change: Risks, Mitigation and Adaptation*. Springer

Tol, Richard, S.J. (2014). *Climate Economics: Economic Analysis of Climate, Climate Change and Climate Policy*. Edward Elgar

Journal Articles where required

Gr IV.7: LABOUR ECONOMICS

Course Objective: To help students understand the role of labour force in economic development, In a country like India where the bulk of the labour force is in the unorganized sector and the organized sector is witnessing “jobless” growth, the importance of issues such as employment and unemployment as well as livelihood and social security for the growing millions continues to assume significance. This Paper exposes students to theoretical as well as empirical issues relating to the labour market with special reference to India, female employment and discrimination, and development of human resources

Syllabus

1. The labor factor in the development of economic thought topics: Labor in Classical and Neoclassical Economics. Labor and Wages in Keynesian economic analysis.

2. Theories of Individual Labor Supply and Labor Demand:

Aggregate labor supply analysis: Labor Force Participate trends, determinants, and analyses. Hours of work and contingent labor market trends. Problems in aggregating labor demand.

Labour theory of value: neoclassical, classical and Marxian approach. Theories of wage determination, competitive and institutional. The evolving wage structure and wage differentials. Issues of Executive pay and trends in alternative pay structures. Short and long run trends in productivity. Productivity-Wage relationships in postwar period.

3. Issues in labour economics from the perspective of developing economies: Theories of wage formation, migration, Lewisian transformation, discrimination and segmented labour markets. Analysis of agrarian labour markets.

4. Conceptual and measurement problems of labour force and workforce: Data sources on labour and workforce and their limitations; sectoral, gendered and locational distribution of workforce; unemployment, underemployment and disguised unemployment; recent trends and patterns.

5. Discrimination in labour market with focus on gender, caste and skills. Regional pattern of employment structure.

6. Contemporary issues and emerging perspectives through recent employment reports and plan documents.

Readings:

Hajela, P.D. (1998), *Labour Restructuring in India: A Critique of the New Economic Policies*, Commonwealth Publisher, New Delhi. ·

Lester, R.A. (1964), *Economics of Labour*, 2nd Edition, Macmillan, New York.

McConnell, Brue & MacPherson (2009), *Contemporary Labor Economics*, 8th edition, McGraw-Hill,.

Papola, T.S., P.P. Ghosh and A.N. Sharma (Eds.) (1993) *Labour, employment and industrial Relations in India*, B.R. Publishing Corporation, New Delhi. ·

Various issues of Employment and Political Weekly (EPW) and Indian journal of labour economics(IJLE)

VenkataRatnam, C.S. (2001), *Globalization and Labour-Management Relations: Dynamics of Change*, Sage Publications/Response Books, New Delhi. .
