

**Department of Finance and Business Economics**  
**MBA (Business Economics)**  
**Semester Wise Course Details**



**Semester I**  
**(Compulsory Courses)**  
**Annexure I**

| <b>Semester I</b> |                          |  |                                    |                 |              |
|-------------------|--------------------------|--|------------------------------------|-----------------|--------------|
|                   |                          |  | <b>Credits in each core course</b> |                 |              |
| <b>S. no.</b>     | <b>Unique Paper Code</b> | <b>Name of Core Courses</b>                | <b>Theory</b>                      | <b>Tutorial</b> | <b>Total</b> |
| 1                 | 424801101                | Micro Economic Analysis                    | 4                                  | 0               | 4            |
| 2                 | 424801102                | Accounting for Business                    | 4                                  | 0               | 4            |
| 3                 | 424801103                | Marketing Management                       | 4                                  | 0               | 4            |
| 4                 | 424801104                | Quantitative Techniques in Management      | 4                                  | 0               | 4            |
| 5                 | 424801105                | Statistics and Data Analysis               | 4                                  | 0               | 4            |
| 6                 | 424801106                | Project Appraisal and New Venture Analysis | 4                                  | 0               | 4            |
| 7                 | 424801107                | Business and Law                           | 4                                  | 0               | 4            |
|                   |                          | <i>Total Credit in Core Course</i>         |                                    |                 | 28           |
|                   |                          | <b>Name of Elective Courses</b>            |                                    |                 | Nil          |
|                   |                          | <i>Total Credit in Elective Course</i>     |                                    |                 | 0            |
|                   |                          | <b>Name of the Open Electives</b>          |                                    |                 | Nil          |
|                   |                          | <i>Total Credit in Elective Course</i>     |                                    |                 | 0            |
|                   |                          | <i>Total Credit in Semester I</i>          |                                    |                 | <b>28</b>    |



## 424801101 : MICRO ECONOMIC ANALYSIS

**Marks: 100**

**Duration: 60 hrs**

### **Course objective:**

This course is specially designed for those who are very keen to know how the world works. The aim of this course is to provide advance knowledge of micro economics to the post graduate students. 0

### **Course Learning Outcomes:**

- Students will be able to learn the fundamental tools of micro economics which are very useful for an economics student.
- After completion of this course students will be able to understand how managerial decisions are taken, how to design and understand the public policy and most important how the modern economy functions.

### **Contents:**

#### **Unit I: Introduction**

Scarcity and choice, Central problems of an economy, Production possibility curve and economic efficiency, Positive and normative economics.

#### **Unit II: Demand and Supply**

Individual and market demand/supply, Predicting the change in market conditions, Elasticity and its application, Impact of Government intervention.

#### **Unit III: 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.

#### **Unit IV: 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.

#### **Unit V: 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, Normal form game, Nash equilibrium, Dominant strategies, Maximin and Minimax strategies, Mixed strategy, Prisoner's Dilemma and its implication, Cartels.

### **Unit VI: Welfare**

Exchange, Market failure, Externalities, Public goods, Asymmetric information.

### **Suggested Readings:**

- Alpha C. Chiang (2005), Fundamental Methods of Mathematical Economics, 4<sup>th</sup> 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, 8<sup>th</sup> edition, Affiliated East West Press.
- Krugman, Paul and Robin Wells(2012), Microeconomics, 3rdEdition, USA, Worth Publishers.
- MankiwN. Gregory (2015), Principles of Microeconomics, 7th edition, Cengage Learning
- Mansfied, 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.

## Weekly Plan:

| Weeks   | Topics Covered   |
|---------|--|
| Week 1  | Scarcity and choice, Central problems of an economy, Production possibility curve and economic efficiency, Positive and normative economics.             |
| Week 2  | Individual and market demand/supply, Predicting the change in market conditions, Elasticity and its application, Impact of Government intervention.      |
| Week 3  | Preference and utility, Different types of utility functions, Choice.  |
| Week 4  | Utility Maximisation, Duality, Indirect utility function and expenditure function.   |
| Week 5  | Roy's Identity, Slutsky equation, Revealed preference.   |
| Week 6  | Technology of production, Production function, Isoquants, Returns to factor and scale, Economies of scope.   |
| Week 7  | Elasticity of substitution, Technical progress, short run and long run costs, Cost Minimisation, Shephard's lemma, Profit maximisation, Envelop theorem. |
| Week 8  | Perfect competition, Monopoly and degree of concentration, Price discrimination, Mark up pricing.  |
| Week 9  | Monopolistic competition, oligopoly Market, Normal form game, Nash equilibrium, Dominant strategies.   |
| Week 10 | Prisoner's Dilemma and its implication, Cartels, Maximin and Minimax strategies, , Mixed strategy.   |
| Week 11 | Marginal cost pricing, Peak-load pricing, Transfer pricing.  |
| Week 12 | Two-part tariff, Bundling, Advertising.  |
| Week 13 | Market failure, Externalities.   |
| Week 14 | Public goods, Economics of information.  |
| Week 15 | Revision of the Course.  |

## Facilitating the achievement of Course Learning Outcomes:

| Unit No. | Course Learning Outcomes  | Teaching and Learning Activity                            | Assessment Tasks |
|----------|---|---|------------------|
|          | Students will be able to  |   |                  |
| I        | <ul style="list-style-type: none"> <li>Relate the central problems of an</li> </ul> | <ul style="list-style-type: none"> <li>Lecture</li> </ul> |                  |

|     |  |  |  |
|-----|--|--|--|
|     | <p>economy with scarcity and choice.</p> <ul style="list-style-type: none"> <li>• Answer how PPC shows the central problems of an economy by indicating scarcity, trade off and opportunity cost.</li> <li>• Distinguish between positive and normative economies.</li> </ul>  | <ul style="list-style-type: none"> <li>• Tutorial</li> </ul>   |  |
| II  | <ul style="list-style-type: none"> <li>• Tell about the demand and supply with factors affecting these two.</li> <li>• Explain what market equilibrium is and how it gets affected by the change in market demand and supply.</li> <li>• Describe price, income and cross elasticity.</li> <li>• Solve the numerical questions on elasticity.</li> </ul>   | <ul style="list-style-type: none"> <li>• Lecture</li> <li>• Tutorial</li> <li>• Case Studies</li> </ul>  | <ul style="list-style-type: none"> <li>• Class Test</li> <li>• Student Presentation</li> </ul> |
| III | <ul style="list-style-type: none"> <li>• Tell how the consumer reaches to its equilibrium under the given constraints.</li> <li>• Use calculus to maximize and minimize the given functions.</li> <li>• Derive Indirect Utility Function, Expenditure Function, Hicksian And Marshallian Demands, Slutsky Equation.</li> <li>• Tell how preference is revealed by the consumer and are they compatible with the axioms of revealed preference theory.</li> </ul> | <ul style="list-style-type: none"> <li>• Lecture</li> <li>• Tutorial</li> <li>• Solving Numerical Exercises</li> </ul>                         |  |
| IV  | <ul style="list-style-type: none"> <li>• Explain how the producer maximizes its output and profit with the least cost combination.</li> <li>• Derive the direct and indirect input demand functions, total cost function, supply function.</li> </ul>  | <ul style="list-style-type: none"> <li>• Lecture</li> <li>• Tutorial</li> <li>• Solving Numerical Exercises</li> </ul>                         |  |
| V   | <ul style="list-style-type: none"> <li>• Explain what are the different markets and how these markets reach to their equilibrium in short as well as long run.</li> <li>• Find the dominating strategies &amp; Nash equilibrium in a Normal form game.</li> <li>• Explain the concept of bundling,</li> </ul>  | <ul style="list-style-type: none"> <li>• Lecture</li> <li>• Tutorial</li> <li>• Solving Numerical Exercises</li> <li>• Case studies</li> </ul> | <ul style="list-style-type: none"> <li>• Class Test</li> </ul>                                 |

|    |   |  |  |
|----|---|--|--|
|    | two part tariff, peak load pricing and advertising.   |  |  |
| VI | <ul style="list-style-type: none"><li>• Explain how the society chooses between many Pareto efficient allocations to gain maximum welfare.</li><li>• Tell what are the possible reasons of market failure and the role of government to correct it.</li></ul> | <ul style="list-style-type: none"><li>• Lecture</li><li>• Tutorial</li><li>• Solving Numerical Exercises</li></ul> |  |



## **424801102: ACCOUNTING FOR BUSINESS**

**Marks: 100**

**Duration: 60 hrs**

### **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.

### **Course Learning Outcomes:**

- Students will learn different terminologies and techniques which are used to make financial decision in a business.
- Students will learn how to analyse the financial information's to take the business decisions.

### **Contents:**

#### **Unit I: 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.

#### **Unit II: 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.

#### **Unit III: 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.

#### **Unit IV: 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.

### **Unit V: 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.

### **Unit VI: 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.

### **Unit VII: 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.

### **Unit VIII: Analysis of Financial Statements**

Financial Ratio, Horizontal Analysis; Vertical Analysis; Ratios – Profitability; Liquidity, Leverage etc; Making intra-firm and inter-firm comparisons.

### **Unit IX: Basic Cost Management Concepts**

Cost Concepts; & Cost Behaviour; Cost Classification – Product cost, Period cost & expenses; Variable & Fixed costs; Cost sheet.

### **Unit X: 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.

### **Unit XI: 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.

## Unit XII: 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.

### Suggested Readings:

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

### Weekly Plan:

| Weeks  | Topics Covered  |
|--------|---|
| Week 1 | 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. |
| Week 2 | Basics of Record keeping; Accounting Process; Double Entry system; Format of an Account, Ledger; Chart of Accounts; Posting; Trial Balance; Adjustments & Closing Process.  |
| Week 3 | 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.  |
| Week 4 | Preparation of Income Statement; Treatment of Extraordinary items and discontinued operations; Current assets-Meaning and accounting treatment as per Indian Accounting Standard.   |
| Week 5 | 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.   |
| Week 6  | 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. |
| Week 7  | Components of Shareholders' Equity; Accounting for Share Capital; Reserves & Surplus; Bonus ; Dividends; Statement of Changes in Equity; Earnings Per Share; Liabilities-meaning.  |
| Week 8  | Classification of Liabilities – Current; Long-Term Liabilities; Contingent Liabilities; Off balance sheet financing; Deferred taxes; Main provisions of relevant Indian Accounting Standard.   |
| Week 9  | Purpose of Cash Flow Statement; Structure of Cash Flow Statement; Preparation & Reporting of Cash Flow Statement; Main provisions of relevant Indian Accounting Standard 7.  |
| Week 10 | Financial Ratio, Horizontal Analysis; Vertical Analysis; Ratios – Profitability; Liquidity, Leverage etc; Making intra-firm and inter-firm comparisons.  |
| Week 11 | Cost Concepts; & Cost Behaviour; Cost Classification – Product cost, Period cost & expenses; Variable & Fixed costs; Cost sheet.   |
| Week 12 | 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.   |
| Week 13 | 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.   |
| Week 14 | 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.   |
| Week 15 | Revision of the Course.  |

### Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes | Teaching and Learning Activity | Assessment Tasks |
|----------|--------------------------|--------------------------------|------------------|
|          | Students will be able to |                                |                  |

|      |   |  |  |
|------|---|--|--|
| I    | <ul style="list-style-type: none"> <li>Explain the financial accounting system and its importance.</li> </ul>   | <ul style="list-style-type: none"> <li>Lecture</li> <li>Tutorial</li> </ul>                                      | <ul style="list-style-type: none"> <li>2 Class Test</li> <li>2 Assignment</li> <li>Solving a Case Study</li> </ul> |
| II   | <ul style="list-style-type: none"> <li>Explain how the accounts are maintained under the double book keeping system.</li> </ul>   | <ul style="list-style-type: none"> <li>Lecture</li> <li>Tutorial</li> </ul>                                      |  |
| III  | <ul style="list-style-type: none"> <li>Recognize the revenue to measure the income of a merchandize firm.</li> <li>Explain the meaning of current assets and its treatment in accounts.</li> </ul>                  | <ul style="list-style-type: none"> <li>Lecture</li> <li>Tutorial</li> </ul>                                      |  |
| IV   | <ul style="list-style-type: none"> <li>Classify the inventories.</li> <li>Calculate the inventory cost.</li> </ul>  | <ul style="list-style-type: none"> <li>Lecture</li> <li>Tutorial</li> <li>Case study</li> </ul>                  |  |
| V    | <ul style="list-style-type: none"> <li>Explain which depreciation method to be used to calculate the cost of acquisition.</li> <li>Explain the various Indian accounting standards for long term assets.</li> </ul> | <ul style="list-style-type: none"> <li>Lecture</li> <li>Tutorial</li> </ul>                                      |  |
| VI   | <ul style="list-style-type: none"> <li>Explain the equity and liabilities.</li> <li>Tell about the provision of equity and liabilities under Indian accounting standards.</li> </ul>                                | <ul style="list-style-type: none"> <li>Lecture</li> <li>Tutorial</li> </ul>                                      |  |
| VII  | <ul style="list-style-type: none"> <li>Prepare the cash flow statement.</li> </ul>  | <ul style="list-style-type: none"> <li>Lecture</li> <li>Tutorial</li> <li>Solving Numerical questions</li> </ul> |  |
| VIII | <ul style="list-style-type: none"> <li>Analyse the different financial ratios.</li> </ul>   | <ul style="list-style-type: none"> <li>Lecture</li> <li>Tutorial</li> <li>Solving Numerical questions</li> </ul> |  |
| IX   | <ul style="list-style-type: none"> <li>Tell about the various costs and their behaviours.</li> </ul>  | <ul style="list-style-type: none"> <li>Lecture</li> <li>Tutorial</li> </ul>                                      |  |
| X    | <ul style="list-style-type: none"> <li>Analyse the different cost behaviours for the managerial decisions.</li> </ul>   | <ul style="list-style-type: none"> <li>Lecture</li> <li>Tutorial</li> <li>Case study</li> </ul>                  |  |
| XI   | <ul style="list-style-type: none"> <li>Explain how to manage the costs to achieve stability in the business.</li> </ul>   | <ul style="list-style-type: none"> <li>Lecture</li> <li>Tutorial</li> </ul>                                      |  |
| XII  | <ul style="list-style-type: none"> <li>Explain how to implement budgetary control system efficiently.</li> </ul>  | <ul style="list-style-type: none"> <li>Lecture</li> <li>Tutorial</li> <li>Case Study</li> </ul>                  |  |



## **424801103: MARKETING MANAGEMENT**

**Marks 100**

**Duration: 60 hrs**

### **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

### **Course Learning Outcomes**

- Understanding Consumer Behaviour
- Understand and develop brands and new products
- Understand and develop pricing, distribution, sales and marketing for products

### **Contents**

#### **Unit I: Introduction**

Changing dictates in business and marketing, introduction to marketing mix and its components and marketing and Ethics, Macro and Micro business environment analysis, Competitive analysis, Understanding consumer behavior leading to STP and Differentiation

#### **Unit II: Product and New Product Development and Management:**

Understanding classifications and types of products/services, product and market maturity levels, product life cycle and management through PLC, understanding new product, idea generation points, process and development stages, decisions involved, typical launch methods, product and brand issue, brand equity, common branding strategies, building successful brands

#### **Unit III: Pricing and its Management**

Objectives, methods and approaches, positions and factors involved, global exposure- issues and challenges

#### **Unit IV: Sales and Distribution**

Importance, distribution mix and functions, formats and levels, planning distribution, channel management, concepts in LSCM, Marketing and selling – Understanding the difference, buyer's expectations, types of selling, organizing the marketing effort.

#### **Unit V: Promotion and Advertising**

Core requirement for effectiveness, promotional mix, challenges, common methods –advertising, PR and SP

## Unit VI: New Areas and Challenges

New areas--industrial, services, rural, digital, global marketing-critical points: Issues and challenges

### Readings:

- Kotler, Philip, Kevin Lane Keller, Abraham Koshy, Mithleshwar Jha (2009)- 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 (2013) - Marketing Management 5th edition, India, McGrawHill

### Weekly Teaching Plan:

| Week   | Topic   |
|--------|---|
| Week 1 | Introduction: Changing dictates in business and marketing, introduction to marketing mix and its components and marketing and Ethics, Macro and Micro business environment analysis |
| Week 2 | Introduction: Competitive analysis, Understanding consumer behavior leading to STP and Differentiation  |
| Week 3 | Product and New Product Development and Management: Understanding classifications and types of products/services, product and market maturity levels                                |
| Week 4 | Product and New Product Development and Management: product life cycle and management through PLC. Understanding new product, idea generation points                                |
| Week 5 | Product and New Product Development and Management: process and development stages, decisions involved, typical launch methods for new products                                     |
| Week 6 | New product Management: product and brand issue, brand equity , common branding strategies, building successful brands  |
| Week 7 | Test and Discussion   |

|         |  |
|---------|--|
| Week 8  | Pricing and its Management: Objectives, methods and approaches, positions and factors involved, global exposure- issues and challenges                 |
| Week 9  | Sales and Distribution: Importance, distribution mix and functions, formats and levels , planning distribution , channel management , concepts in LSCM |
| Week 10 | Sales and Distribution: Marketing and selling –Understanding the difference, buyer’s expectations, types of selling, organizing the marketing effort   |
| Week 11 | Promotion and Advertising: Core requirement for effectiveness, promotional mix, challenges, common methods –advertising, PR and SP                     |
| Week 12 | New Areas and Challenges: industrial, services, rural, digital, global marketing-critical points: Issues and challenges                                |
| Week 13 | Test and Discussion  |
| Week 14 | Student Presentations  |
| Week 15 | Student Presentations  |

### Learning Outcomes

| Unit No. | Course Outcomes   | Learning | Teaching and Learning Activity | Assessment Tasks                             |
|----------|---|----------|--------------------------------|--|
| 1.       | Understanding the changing dictates in business and marketing       |          | Lectures, case studies         | Test, Group discussion, Student Presentation |
| 2.       | Understanding how to manage a product and a new product             |          | Lectures, case studies         | Test, Group discussion, Student Presentation |
| 3.       | Understanding the issues and challenges related to pricing.         |          | Lectures, case studies         | Test, Student Presentation, Group discussion |
| 4.       | Understanding the importance and planning of sales and distribution |          | Lectures, case studies         | Test, Student Presentation, Group discussion |



|    |   |                        |  |
|----|---|------------------------|--|
| 5. | Understanding the different approaches to advertising and promotion | Lectures, case studies | Test, Student Presentation, Group discussion |
| 6. | Understanding new areas in marketing and challenges.                | Lectures, case studies | Test, Student Presentation, Group discussion |





## **424801104 : QUANTITATIVE TECHNIQUES IN MANAGEMENT**

**Marks: 100**

**Duration: 60 hrs**

### **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.

### **Course Learning Outcomes:**

- Students will be able to connect the techniques taught in this course with the real world.
- Students will gain practical knowledge in this course which is important for taking managerial decisions.

### **Contents:**

#### **Unit I: 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.

#### **Unit II: 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.

#### **Unit III: Integer Programming, Goal Programming and Non-linear Programming**

Integer programming—Modelling with binary variables, Goal programming, Non-linear programming.

#### **Unit IV: 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.

**Unit V: Network Models and Project Management**

Minimal Spanning Tree technique, Maximal flow technique, Shortest-Route Technique, PERT and CPM.

**Unit VI: 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).

**Unit VII: 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.

**Unit VIII: 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.

**Suggested Readings:**

- Hillier, Frederick and Gerald Lieberman (2015) Introduction to Operations Research (10<sup>th</sup> 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.

**Teaching Plan:**

| <b>Weeks</b> | <b>Topics Covered</b>   |
|--------------|---|
| Week 1       | Basic Assumptions, Formulating LP problems, Graphical Analysis, Solving Minimization problems, Sensitivity Analysis, Simplex Method—Setting up initial Simplex Solution, Simplex solution procedures. |

|         |   |
|---------|---|
| Week 2  | Solving LP Maximization Problems, Surplus and Artificial variables, Solving Minimization problems, Special cases, Sensitivity Analysis, The Dual.   |
| Week 3  | Setting up a Transportation problem, Initial Solution: Northwest Corner Rule, Stepping-Stone method, MODI method, Vogel's Approximation method.   |
| Week 4  | Unbalanced transportation problems, Special Cases, Approach of Assignment Model, Hungarian Method/Flood's Technique, Unbalanced Assignment problems, Maximization Assignment Problems.  |
| Week 5  | Integer programming—Modelling with binary variables.  |
| Week 6  | Goal programming, Non-linear programming.   |
| Week 7  | Decision making under Uncertainty—Maximax, Maximin, Criterion of Realism, Equally likely, Minimax Regret.   |
| Week 8  | Decision making under Risk—Expected monetary value, Expected value of perfect information, Expected Opportunity loss, Decision Trees, Utility Theory.   |
| Week 9  | Minimal Spanning Tree technique, Maximalflow technique, Shortest-Route Technique.   |
| Week 10 | PERT and CPM.   |
| Week 11 | 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). |
| Week 12 | 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.   |
| Week 13 | Advantages and disadvantages, Monte Carlo Simulation, Simulation and inventory analysis, Simulation of a queuing problem.   |
| Week 14 | States and State probabilities, Matrix of transition probabilities, Equilibrium conditions.   |
| Week 15 | Revision of the Course.   |

### Facilitating the achievement of Course Learning Outcomes:

| Unit No. | Course Learning Outcomes   | Teaching and Learning Activity                            | Assessment Tasks |
|----------|--|---|------------------|
|          | Students will be able to   |   |                  |
| I        | <ul style="list-style-type: none"> <li>Understand the basic assumptions</li> </ul> | <ul style="list-style-type: none"> <li>Lecture</li> </ul> |                  |

|     |   |   |   |
|-----|---|---|---|
|     | <p>and properties of linear programming.</p> <ul style="list-style-type: none"> <li>Graphically solve any LP problem with two variables by both the corner pint and iso profit line methods.</li> <li>Understand special issues in LP such as infeasibility, unboundedness, redundancy and alternative optimal solutions.</li> <li>Understand the role of sensitivity analysis.</li> <li>Solve the LP problem by simplex method.</li> <li>Use MS Excel to solve the LP problems.</li> </ul> | <ul style="list-style-type: none"> <li>Tutorial</li> <li>Solving Numerical Questions</li> <li>Practical using Ms Excel.</li> </ul>                  | <ul style="list-style-type: none"> <li>2 Class Test</li> <li>8 Assignments for each unit</li> <li>Solving a Case Study</li> </ul> |
| II  | <ul style="list-style-type: none"> <li>Explain the structure of LP problems for the transportation, transhipment, and assignment models.</li> <li>Solve the facility location and other application problems with transportation models.</li> </ul>   | <ul style="list-style-type: none"> <li>Lecture</li> <li>Tutorial</li> <li>Solving Numerical Questions</li> <li>Practical using Ms Excel.</li> </ul> |   |
| III | <ul style="list-style-type: none"> <li>Differentiate between LP and integer programming.</li> <li>Understand and solve the tree types of integer programming problems.</li> <li>Formulate and solve goal programming problems using MS Excel.</li> <li>Formulate nonlinear programming problems and solve is through MS. Excel.</li> </ul>  | <ul style="list-style-type: none"> <li>Lecture</li> <li>Tutorial</li> <li>Solving Numerical Questions</li> <li>Practical using Ms Excel.</li> </ul> |   |
|     | •   | •   |   |
| IV  | <ul style="list-style-type: none"> <li>Explain how to use the probability values to make decisions under risk.</li> <li>Make accurate and useful decision trees.</li> <li>Understand the importance and use of utility theory in decision making.</li> </ul>  | <ul style="list-style-type: none"> <li>Lecture</li> <li>Tutorial</li> <li>Solving Numerical Questions</li> <li>Practical using Ms Excel.</li> </ul> |   |
| V   | <ul style="list-style-type: none"> <li>Solve the models based on shortest-</li> </ul>   | <ul style="list-style-type: none"> <li>Lecture</li> </ul>   |   |

|      |   |   |  |
|------|---|---|--|
|      | <p>route and maximal flow problem.</p> <ul style="list-style-type: none"> <li>• Solve minimal-spanning tree problems.</li> <li>• Understand how to plan, monitor and control projects with use of PERT and CPM.</li> </ul>  | <ul style="list-style-type: none"> <li>• Tutorial</li> <li>• Solving Numerical Questions</li> <li>• Practical using Ms Excel.</li> </ul>                    |  |
| VI   | <ul style="list-style-type: none"> <li>• Understand the importance of inventory control.</li> <li>• Handle the problems of inventory control using techniques like. EOQ, ROP, quantity discount, safety stock, just in time inventory etc.</li> </ul>             | <ul style="list-style-type: none"> <li>• Lecture</li> <li>• Tutorial</li> <li>• Solving Numerical Questions</li> <li>• Practical using Ms Excel.</li> </ul> |  |
| VII  | <ul style="list-style-type: none"> <li>• Describe the trade off curve for cost of waiting time and cost of service.</li> <li>• Understand the three parts of queuing system.</li> <li>• Analyse a variety of operating characterises of waiting lines.</li> </ul> | <ul style="list-style-type: none"> <li>• Lecture</li> <li>• Tutorial</li> <li>• Solving Numerical questions</li> <li>• Practical using Ms Excel.</li> </ul> |  |
| VIII | <ul style="list-style-type: none"> <li>• Tackel a wide variety of problems using simulation.</li> <li>• Understand the seven steps of simulation.</li> </ul>  | <ul style="list-style-type: none"> <li>• Lecture</li> <li>• Tutorial</li> <li>• Solving Numerical questions</li> <li>• Practical using Ms Excel.</li> </ul> |  |



## **424801105: STATISTICS AND DATA ANALYSIS**

**Marks: 100**

**Duration: 60 hrs**

### **Course Objective:**

The objective of this course is to develop essential data handling skills and to equip students with basic statistical tools for analyzing data using specialized software. It also seeks to provide a strong foundation in probability theory and statistical inference.

### **Course Learning Outcomes:**

- Students will learn to carry out exploratory data analysis using a range of Graphical, Tabular and Numerical tools.
- Students will comprehend basic probability theory and learn to apply probability distributions (for discrete and continuous random variables) for solving problems in real life contexts pertaining to business and management.
- Students will learn to carry out Estimation (Point and Interval estimation) and a variety of Parametric and Non-parametric Hypotheses tests (concerning population proportion, mean and variance of a single population and for two independent populations; Tests of independence; ANOVA; etc.) on the basis of random samples.
- Students will learn to use standard firm level databases (e.g., Capitaline) and carry out statistical analysis using specialized software.

### **Contents:**

#### **Unit I: 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 etc.); Index Numbers and Properties of Time Series Data - Components of Time series (Trend, Cyclical, Seasonal, Irregular components); Smoothing Methods (e.g., Moving Averages).



## **Unit II: Basic probability theory, Discrete and Continuous Probability Distributions**

Axioms of probability; Conditional probability; Bayes' Theorem; Concept of Random Variables and 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 and Exponential distributions.

## **Unit III: 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.

## **Unit IV: 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

## **Unit V: Analysis of Variance**

One-Factor ANOVA; Testing for Equality of k Population Means; F-test; Fisher's LSD Procedure; Two-Factor ANOVA.

## **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’).
- **Databases** : Firm-level database such as Capitaline or Prowess
- 

### Weekly Teaching Plan:

| Week    | Topic  |
|---------|--|
| Week 1  | Graphical, Tabular and Numeric tools for Exploratory Data Analysis   |
| Week 2  | Index Numbers and Properties of Time-Series Data   |
| Week 3  | Axioms of Probability, Concepts of Joint, Marginal and Conditional Probability; Concept of Random Variables and Features of univariate and joint probability distributions |
| Week 4  | Binomial, Poisson, Normal and Standard Normal Distributions  |
| Week 5  | Exponential Distribution; Random Sampling and Point Estimation   |
| Week 6  | Properties of Estimators, ; t, chi-squared and F Distributions; Sampling Distribution of Sample Mean, Proportion and Variance  |
| Week 7  | Internal Test 1; Interval Estimation   |
| Week 8  | Hypotheses Testing – Basic concepts; Tests of Mean, Proportion and Variance from a single population   |
| Week 9  | Tests of Mean, Proportion and Variance from two populations  |
| Week 10 | Tests of Goodness of Fit and Independence  |
| Week 11 | Internal Test 2; Non-parametric Tests - Sign Test; Wilcoxon Signed-Rank Test;  |
| Week 12 | Mann-Whitney-Wilcoxon Test; Kruskal-Wallis Test; Test for Significant Rank Correlation   |
| Week 13 | ANOVA – One-Factor   |
| Week 14 | ANOVA – Two-Factor   |
| Week 15 | Submission of Empirical Project, Presentations and Viva  |



### Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes   | Teaching and Learning Activity                             | Assessment Tasks  |
|----------|--|--|---|
| 1.       | Learning to carry out Exploratory Data Analysis using specialized software packages  | Lectures and Data Analyses using software                  | Computer Assignments and Empirical Project                      |
| 2.       | Learning to apply basic probability theory and probability distributions for discrete and continuous random variables for solving problems | Lectures and Problem solving                               | Classroom Quiz and Test   |
| 3.       | Understanding concepts and learning to implement random sampling and estimation using data   | Lectures, Problem Solving and Data Analyses using software | Classroom Quiz, Test, Computer Assignment and Empirical Project |
| 4.       | Understanding concepts and learning to implement a range of hypotheses tests using data  | Lectures, Problem Solving and Data Analyses using software | Classroom Quiz, Test, Computer Assignment and Empirical Project |
| 5.       | Understanding concepts and learning to implement ANOVA using data  | Lectures, Problem Solving and Data Analyses using software | Classroom Quiz, Test, Computer Assignment and Empirical Project |



## **424801106: PROJECT APPRAISAL & NEW VENTURE ANALYSIS**

**Marks: 100**

**Duration: 60 hrs**

### **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 (both for private sector and Public Sector projects) understanding its planning and implementation.

### **Course Outcome:**

- Students will be able to prepare the feasibility report (both for private sector and public sector) for new projects (start-up), based on the theoretical approaches and data procured at different levels.
- Student will be able to know the different incentives, schemes & means of financing the new Investment Projects.

### **Contents:**

#### **UNIT I: Project Appraisal - An introduction**

Project Cycle, Project Cycle Management, Development Planning, Project Ideas and choice

#### **UNIT II: Market Analysis of a Project**

Project Identification and Design, Market and Demand Analysis of a Project, Competitiveness of the market. Estimating the market size, Techniques, of Demand Forecasting

Technical Analysis of a Project: Business and Technology, Technology Acquisition, Management of Technology.

#### **UNIT III: 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.

Risk and Sensitivity Analysis: Break even Analysis Scenario Analysis, Simulation Approach and Decision Tree Analysis.

#### **UNIT IV: Economic Analysis of a Project**

Rationale for social Cost Benefit Analysis, UNIDO Approach to Project Appraisal, Little Mirrlees Approach, World Bank Approach, Project Appraisal and Indian Plans.



Impact Analysis of a Project: Environment impact Analysis, Social impact Analysis, Benefit Estimation in social and infrastructure Projects.

**UNIT V: Entrepreneurship: Entrepreneurship Theories and Perspective, Corporate Entrepreneurship**

New Venture: Elements for success

Starts- Ups in India: Incentives and schemes for start ups Means of Financing.

**Reading list**

- Agrawal Rashmi, Mehra Yogieta. SC (2017). Project Appraisal & Management
- Boardman A, D Greenberg, A Vining and D Weimer (2014).Cost-Benefit Analysis – Concepts and Practice, Harlow: Pearson.
- Clifton, David and David Fyfee (1977).Project Feasibility Analysis, Wiley-Interscience Publication
- Cuervo, Alvaro, Domingo Ribeiro and Salvador Roig (2007). Entrepreneurship, Springer
- Glasson J, R Therivel and A Chadwick (2012).Introduction to Environmental Impact Assessment, Routledge.
- 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
- Imboden, N. (1980). A management approach to Project Appraisal and Evaluation, OECD Publication.
- Kirkpatrick, Colin and John Weiss (1996).Cost Benefit Analysis and Project appraisal in Developing Countries, Edward Elgar
- Potts, David (2005). Project Planning and Analysis for Development, Viva Books Pvt. Ltd.
- UNIDO (1972).Guidelines for Project Evaluation, Oxford and IBH Publishing Co.

**Weekly Teaching Plan:**

| <b>Weeks</b> | <b>Topic</b>   |
|--------------|--|
| Week 1       | Project Appraisal: An Introduction Project cycle. Project cycle Management. Project Ideas and choice |
| Week 2       | Development Planning and Project Appraisal   |
| Week 3       | Market feasibility Analysis of a Project   |
| Week 4       | Students Workshop  |
| Week 5       | Technical Feasibility Analysis of a Project  |
| Week 6       | Financial Feasibility Analysis of a Project  |

|         |  |
|---------|--|
| Week 7  | Economic Feasibility Analysis a Project  |
| Week 8  | UNIDO, Little Mirrlees and World Bank Approach for the feasibility Report Preparation for Public Sector Projects |
| Week 9  | Environment Analysis of a Project. Social Impact Analysis  |
| Week 10 | Risk, Sensitivity and Uncertainty analysis of a project  |
| Week 11 | Entrepreneurship: Theories and Perspective   |
| Week 12 | New Venture: Elements for success  |
| Week 13 | Student' Presentations   |
| Week 14 | Project Appraisal in India, New schemes for start – Ups.   |
| Week 15 | Case studies and Discussion, Means of Financing Projects in India.   |

### Facilitating the achievement of course learning outcomes

| UNIT | Course Learning Out comes  | Teaching & Learning Activity | Assessment Tasks   |
|------|--|------------------------------|--|
| 1    | Understanding the Basic concepts of Project Appraisal Project cycle, Development Planning etc. | Lectures                     | Problem Solving, Group Discussions                                   |
| 2    | Understanding and Preparation of Market Analysis and Technical analysis of a Project           | Lectures & Case Studies      | Problem Solving, Group Discussions & Students' workshop              |
| 3    | Understanding & Preparation of Financial Analysis and Risk Analysis of a Project               | Lectures & Case Studies      | Problem Solving Students, Group Discussions & Students' Presentation |
| 4    | Understanding & Preparation of Economic feasibility of Public Sector Project                   | Lectures & Case Studies      | Problem Solving Students, Group Discussions & Students' Presentation |
| 5    | Understanding the different theories, characteristics, Barriers etc. of                        | Lectures & Case Studies      | Problem Solving Students, Group Discussions &                        |



|  |  |  |                        |
|--|--|--|------------------------|
|  | Entrepreneurship, and the economic environment in India for New start- ups |  | Students' Presentation |
|--|--|--|------------------------|



## **424801207: BUSINESS AND LAW**

**Marks: 100**

**Duration: 60 hrs**

### **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.

### **Course Learning Outcomes:**

- Various acts and laws that govern the businesses in India.
- The critical evaluation and assessment of regulations that prevail in India and their impact on the businesses.

### **Contents:**

#### **Unit I: Indian Contract Laws**

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.

#### **Unit II: Indian Companies Act and Management**

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.

#### **Unit III: Major Reforms**

The Limited Liability Partnership Act, 2008: meaning and nature of limited partnership, formation, partners & their relations, extent and limitation of liability. The Right to Information Act, 2005: Salient features of the act and its redressal mechanism

### Unit IV: Major Acts

Information Technology Act, 2000: Scheme of the act, definitions, digital signature, electronic governance. Competition Act, 2002: objectives, definitions, competition policy, prohibition of certain agreements and abuse of dominant position. Foreign Exchange Management Act, 1999.

### Unit V: Intellectual Property Rights

Consumer Protection Act 1986: Objectives and machinery for consumer protection, defects and deficiency removal, rights of consumers. Intellectual Property Rights: The Patents Act, 1970, The Copyright Act, 1957, The Trade Mark Act, 1999.

#### 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

#### Weekly Teaching Plan:

| Week   | Topic   |
|--------|---|
| Week 1 | Indian Contract Act, Law of contract, meaning of contract, agreement, essential elements of a valid contract. |
| Week 2 | Classification of contracts, proposal and acceptance, free consent, void agreement.                           |

|         |   |
|---------|---|
| Week 3  | The Indian Companies Act, 1956: Meaning and types, incorporation, memorandum & articles of association, prospectus.   |
| Week 4  | Issue of shares and bonus shares, rights issue, sweat equity, role of directors, share qualification, company meetings and management.                            |
| Week 5  | The Limited Liability Partnership Act, 2008: meaning and nature of limited partnership, formation, partners & their relations, extent and limitation of liability |
| Week 6  | The Right to Information Act, 2005: Salient features of the act and its redressal mechanism   |
| Week 7  | Students Presentation.  |
| Week 8  |   |
| Week 9  | Information Technology Act, 2000: Scheme of the act, definitions, digital signature, electronic governance.   |
| Week 10 | Competition Act, 2002: objectives, definitions, competition policy, prohibition of certain agreements and abuse of dominant position.                             |
| Week 11 | Foreign Exchange Management Act, 1999.  |
| Week 12 | Consumer Protection Act 1986: Objectives and machinery for consumer protection, defects and deficiency removal, rights of consumers.                              |
| Week 13 | Intellectual Property Rights: The Patents Act, 1970, The Copyright Act, 1957, The Trade Mark Act, 1999.   |
| Week 14 | Students Presentation.  |
| Week 15 |   |

### Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes            | Teaching and Learning Activity | Assessment Tasks  |
|----------|-------------------------------------|--------------------------------|---|
| 1.       | Various provision of contract law.  | Lectures                       | Problem solving, Group discussion, Student Presentation |
| 2.       | Assessment of Indian companies act. | Lectures, case studies         | Problem solving, Student Presentation, Group            |





## Semester 2

### (Compulsory Courses)

| Semester II |                   |  |                             |          |           |
|-------------|-------------------|--|-----------------------------|----------|-----------|
| S. no.      | Unique Paper Code | Name of Core Courses                   | Credits in each core course |          |           |
|             |                   |  | Theory                      | Tutorial | Total     |
| 1           | 424801201         | Macroeconomic Analysis & Policy        | 4                           | 0        | 4         |
| 2           | 424801202         | International Economics                | 4                           | 0        | 4         |
| 3           | 424801203         | Firms, Markets and Public Policy       | 4                           | 0        | 4         |
| 4           | 424801204         | Environmental Economics                | 4                           | 0        | 4         |
| 5           | 424801205         | Business Finance                       | 4                           | 0        | 4         |
| 6           | 424801206         | Basic Econometrics                     | 4                           | 0        | 4         |
| 7           | 424801207         | Leadership and Organization            | 4                           | 0        | 4         |
|             |                   | <i>Total Credit in Core Course</i>     |                             |          | 28        |
|             |                   | <b>Name of Elective Courses</b>        |                             |          | Nil       |
|             |                   | <i>Total Credit in Elective Course</i> |                             |          | 0         |
|             |                   | <b>Name of the Open Electives</b>      |                             |          | Nil       |
|             |                   | <i>Total Credit in Elective Course</i> |                             |          | 0         |
|             |                   | <i>Total Credit in Semester II</i>     |                             |          | <b>28</b> |



## **424801201: MACROECONOMIC ANALYSIS AND POLICY**

**Marks: 100**

**Duration: 60 hrs**

### **Course Objective:**

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

### **Course Learning Outcomes:**

- Students will comprehend inter-relations among key macroeconomic aggregates (such as GDP, Fiscal Deficit, Investment-Saving Gap, Current Account Balance etc.) in open and closed economies.
- Students will be able to analyse the inter-relations between real and financial sectors in the short run and medium run in closed and open economies.
- Students will learn about the determinants of long run growth in per capita income and appreciate the key role of technological progress and its drivers in this context.

### **Contents:**

#### **Unit I: Basic Accounting Concepts and Tools in Closed and Open Economies:**

National Income Accounting, Exchange Rates (Nominal, Real, Effective Exchange Rates; Depreciation, Appreciation etc.) and Balance of Payments Accounts (Current Account, Financial Account, Foreign Exchange Reserves etc.).

#### **Unit II: Keynesian Theory of the Short-run in a Closed Economy:**

Determination of equilibrium output and interest rate (Simple Keynesian and IS-LM models); Monetary and Fiscal Policies; Government Debt; Channels of Monetary Transmission

### **Unit III: Open Economy IS-LM Framework :**

Interest rates, Exchange rates and Capital Flows in open economies - the Covered and Uncovered Interest-parity conditions; Monetary and Fiscal Policies in Open Economies under Fixed and Flexible Exchange rates - The Mundell-Fleming Model

### **Unit IV: Analysis of Inflation and Unemployment :**

The Labour Market and Wage Determination; Determination of Aggregate Prices and Policy analysis in the AS-AD Framework; The Phillips Curve, theories of unemployment and determinants of inflation

### **Unit V: Theories of Economic Growth :**

Harrod-Domar Model; Solow Model; Evidence on Convergence and Conditional Convergence; Theories of Endogenous Growth

### **Unit VI: Macroeconomic Crises :**

Causes, implications and policy response associated with the Global Financial crisis - the roles of financial institutions (banks and shadow banks), asset price bubbles and unconventional monetary and fiscal policies.

### **Readings:**

- Blanchard, O. (2013). Macroeconomics. New Jersey, USA : Pearson Education (Latest Edition).
- Blanchard, O. J., Faruqee, 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.
- Jones, C. : (2007). Introduction to Economic Growth. New York :W.W. Norton.
- 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.
- Rakshit, M.K. (2012). Keynes and the Contemporary Economic Crisis. Money and Finance. ICRA Bulletin, September : 43-87.
- Rakshit, M.K. (2016). India's Post-Crisis Macroeconomic Slowdown : Some Perspectives. Money and Finance. ICRA Bulletin, April : 49-84.
- Ray, P. (2013). Monetary Policy. New Delhi :Oxford University Press.

- Sikdar, S. (2006). Principles of Macroeconomics. New Delhi :Oxford University Press (Latest Edition).
- Sikdar, S. (2013). Capital Flows and Exchange Rate Management. New Delhi :Oxford University Press.
- Stiglitz, J. (2018). The Theory of Credit and Macroeconomic Stability in Dastidar, Ananya G., Rajeev Malhotra and Vivek Suneja (Eds.), 'Economic Theory and Policy amidst Global Discontent'. London : Routledge.
- **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)

### Weekly Teaching Plan:

| Week    | Topic   |
|---------|---|
| Week 1  | National Income Accounting in open and closed economies   |
| Week 2  | Concepts of Real and Nominal Exchange Rates and Balance of Payments   |
| Week 3  | Simple Keynesian Model and the Keynesian Multiplier   |
| Week 4  | The Demand and Supply of Money, Money Multiplier and derivation of IS and LM Curves   |
| Week 5  | Monetary and Fiscal Policy in the IS-LM Model   |
| Week 6  | Interest Parity Condition and the derivation of the Open Economy IS-LM Model  |
| Week 7  | Monetary and Fiscal Policy in an Open Economy under Fixed and Flexible Exchange Rates   |
| Week 8  | Internal Test ; Derivation of AD curve  |
| Week 9  | The Labour Market, determination of wages and prices and the Aggregate Supply Curve   |
| Week 10 | Policy Analysis in the AS-AD Framework  |
| Week 11 | The Phillips Curve and the relation between inflation and unemployment;   |
| Week 12 | Growth Theories : a brief introduction to the Harrod-Domar Model; The Solow Model; Submission of Written Assignment                                 |
| Week 13 | Role of Technology in the Solow Model and the concepts of Convergence and Conditional Convergence; An introduction to theories of Endogenous Growth |
| Week 14 | The Global Financial Crisis – causes and implications; The roles of asset markets and financial institutions (banks and shadow banks)               |
| Week 15 | An introduction to Unconventional monetary and fiscal policies; Submission of Project Report  |

## Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes   | Teaching and Learning Activity  | Assessment Tasks  |
|----------|--|---|---|
| 1.       | Understanding inter-relations among key macroeconomic aggregates in open and closed Economy  | Lectures and Data Analyses on National Income Accounts and Balance of Payments  | Classroom Quiz, Test and Written Assignment             |
| 2.       | Factors governing the conduct of Monetary and Fiscal Policy in the Short Run                 | Lectures and regular analyses of contemporary macroeconomic phenomenon in India and abroad with inputs from periodicals such as The Economist | Classroom Quiz, Test and Written Assignment             |
| 3.       | Comprehending the Inter-relation between Exchange Rate and Interest Rates in an Open Economy | Lectures and regular analyses of contemporary macroeconomic phenomenon in India and abroad with inputs from periodicals such as The Economist | Classroom Quiz, Test and Written Assignment             |
| 4.       | Understanding the determinants of Economic Growth in the Long-run                            | Lectures and Analysis of Country experiences  | Classroom Quiz, Test and Project based on Data analyses |



|    |   |  |   |
|----|---|--|---|
| 5. | Causes and Policy Implications of the Global Financial Crisis | Lectures and Analysis of Country experiences | Classroom Quiz, Test and Project based on Data analyses |
|----|---|--|---|



## 424801202: INTERNATIONAL ECONOMICS

**Marks: 100**

**Duration: 60 hrs**

**Course Objectives:** This course seeks to equip students with a basic understanding of International Economics. The course introduces the theories of international trade. The course tries to answer the three prominent questions of global trade, viz, what is the basis of trade? what is the pattern of trade and the gains from trade? Further, it gives an insight of the issues related with the trade policies of the nations.

### **Course Learning Outcomes:**

- Introduction to the theories of International trade.
- Controversies related with the empirical evidences of International trade.
- Understanding of the fundamentals of protectionism and its effect on the different sections of society.
- Alternative discourses on the trade and development.

### **Reading List:**

#### **Unit I: 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.

#### **Unit II: General Equilibrium model of trade**

Offer curve, Terms of trade; Trade and welfare; Immiserizing growth; Policy analysis in the standard trade model.

#### **Unit III: Modern Trade Theories**

Imperfect competition and Economies of Scale; Intra-industry trade; The Krugman model and The Gravity model

#### **Unit IV: 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



## Unit V: Regionalism

Various Forms of Economic Integration; Theory of Customs Union

## Unit VI: Political economy of Trade policy

Controversies in trade policy; Multilateral trading arrangements; Dependency Theories.

### Suggested 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, 10<sup>th</sup> 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), 9<sup>th</sup> edition.
- Ghosh. B.N. (2001), Dependency Theory Revisited, Deep Publications

### Teaching Plan:

|         |   |
|---------|---|
| Week 1: | Theories of International Trade: Theories of Absolute Advantage, Comparative Advantage and Opportunity Costs.                   |
| Week 2: | Heckscher Ohlin Theory of Trade (Factor Price Equalization, Stolper-Samuelson theory)   |
| Week 3: | Empirical evidence on Heckscher-Ohlin Theory.   |
| Week 4: | General Equilibrium model of trade: Offer curve, Terms of trade.  |
| Week 5: | Trade and welfare; Immiserizing growth; Policy analysis in the Standard Trade Model.  |
| Week 6: | Students' Presentations on the Practical aspects of the theories covered in earlier classes taking country specific case study. |
| Week 7: |   |

|         |   |
|---------|---|
| Week 8: | Modern Trade Theories: Imperfect competition and Economies of Scale. Intra-industry trade.  |
| Week 9: | The Krugman Model. The Gravity Model.   |
| Week10: | Partial equilibrium Analysis of Tariff; Effects of Tariff on Consumer's and Producer's Surplus;   |
| Week11: | Various Non-tariff Barriers. Various Forms of Economic Integration.   |
| Week12: | Theory of Customs Union. Political economy of Trade policy: Controversies in trade policy, Multilateral trading arrangements;                   |
| Week13: | Dependency Theories.  |
| Week14: | Students Presentation on the issues emerging from the trade policy of a country and issues emerging from the Multilateral trading arrangements. |
| Week15: |   |

### Learning Outcomes:

| Unit Number | Course Outcome  | Learning | Teaching and Learning Activity | Assessment Tasks  |
|-------------|---|----------|--------------------------------|---|
| 1.          | Learn about the fundamentals of international trade. Principles which govern the trade and controversies related with the empirical evidences.            |          | Lecture/case studies.          | Class test/ Verbal question answer/ problem solving/group discussion. |
| 2.          | Understanding about the trade and welfare, effect of trade on the different section of the society.   |          | Lecture/case studies.          | Students Presentation/ group discussion                               |
| 3.          | Economies of scale as a determinant of trade and its repercussions.   |          | Lecture/ class Discussion      | Class test/Verbal question answer.                                    |
| 4.          | Basics about the trade policy and the policy instruments used and how the importing nation as well the exporting nation and world as a whole is affected. |          | Lecture/case studies.          | Students' Presentation/ group discussion.                             |



|    |   |                       |  |
|----|---|-----------------------|--|
| 5. | How free trade is good and the static and dynamic benefits of trade.                              | Lecture/case studies. | Class test.<br>/Verbal question answer.        |
| 6. | Controversies related with trade policies of the nations and alternative narrative of free trade. | Lecture/case studies. | Students<br>Presentation/<br>group discussion. |



## **424801203: FIRMS, MARKETS AND PUBLIC POLICY**

**Marks: 100**

**Duration: 60 hrs**

### **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.

### **Course Learning Outcomes:**

- Students will be able to understand the link and interaction between firms and markets in an economy and the importance of public policy in this context.
- The students will be able to apply the theory of industrial organization and game theory to explain this interaction in the real world.

### **Contents:**

#### **Unit I: Introduction:**

The relationship between firms, markets and public policy.

#### **Unit II: 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

#### **Unit III: 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

#### **Unit IV: Theory and Growth of the Firm:**

Characteristics, Boundaries of the firm, Entry and Transaction costs of the firm, Separation of ownership and control, Size and growth, Vertical Integration,



Product diversification, Mergers and Acquisitions, Horizontal and Vertical Differentiation

**Unit V: Networks and Auctions:**

Networks, Competition and Complementary services, Network goods and Public Policy, Auctions and Auction markets

**Unit VI: Public Policy:**

Law and Economics, Antitrust legislation, Regulation and Deregulation

**Readings:**

- Cabral Luis M.B. (2017) Introduction to Industrial Organization. Cambridge, MA: MIT Press
- Pepall, Lynne, Dan Richards and George Norman (2008) Industrial Organization: Contemporary Theory and Empirical Applications 4<sup>th</sup> Edn. 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

**Weekly Teaching Plan:**

| <b>Week</b> | <b>Topic</b>  |
|-------------|---|
| Week 1      | The relationship between firms, markets and policy.   |
| Week 2      | Introduction to Game Theory   |
| Week 3      | Static Models of □Oligopoly—Cournot model, Bertrand model, Strategic complements □and substitutes, Dynamic Games, Stackelberg Model |
| Week 4      | Structure-Conduct-Performance Paradigm: Market Structure  |
| Week 5      | Structure-Conduct-Performance Paradigm: Market Conduct  |
| Week 6      | Structure-Conduct-Performance Paradigm: Market Performance  |
| Week 7      | Student Presentations   |
| Week 8      | Theory and Growth of the Firm: Characteristics, Boundaries of the firm, Entry and Transaction costs of the firm                     |
| Week 9      | Theory and Growth of the Firm: Size and growth, Vertical Integration  |

|         |  |
|---------|--|
| Week 10 | Theory and Growth of the Firm: Mergers and Acquisitions, Horizontal and Vertical Differentiation                                       |
| Week 11 | Student Presentations  |
| Week 12 | Networks and Auctions: Networks, Competition and Complementary services, Network goods and Public Policy, Auctions and Auction markets |
| Week 13 | Networks and Auctions: Auctions and Auction markets  |
| Week 14 | Public Policy: Law and Economics, Antitrust legislation, Regulation and Deregulation   |
| Week 15 | Student Presentations  |

### Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes   | Teaching and Learning Activity | Assessment Tasks  |
|----------|--|--------------------------------|---|
| 1.       | Understanding the Game Theoretic approach to Oligopoly and Strategic Interaction | Lectures                       | Problem solving, Group discussion, Student Presentation |
| 2.       | Understanding the SCP paradigm   | Lectures, case studies         | Problem solving, Student Presentation, Group Project    |
| 3.       | Understanding the Theory and Growth of Firms                                     | Lectures, case studies         | Problem solving, Student Presentation, Group Project    |
| 4.       | Networks and Auctions  | Lectures, case studies         | Problem solving, Student Presentation, Group Project    |
| 5.       | Understanding the role and importance of Public Policy.                          | Lectures, case studies         | Problem solving, Student Presentation, Group Project    |



## **424801204: ENVIRONMENTAL ECONOMICS**

**Marks: 100**

**Duration: 60 hrs**

### **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.

### **Course Learning Outcomes:**

- Students will be able to understand the importance of natural resources and thus know the Urgency for protection and management of Natural Resources.
- The students will be equipped with different national & international initiatives for the protection of Environment.

### **Contents:**

#### **UNIT I: The Economy and the Environment**

Classical, Neo Classical, and Ecological perspective.

Sustainable Development: Concepts, Theories, Principles and strategies of Sustainable Development.

#### **UNIT II: Externalities**

Public Goods, Market Failure, Property rights; Economic incentives for Environmental Protection: Market Based Instruments, Command and Control, Alternative approaches.

#### **UNIT III: Environment Impact Assessment**

Valuation Techniques Natural Resources. Stated Preference approaches, Surrogate Market

approaches, Conventional market approach. Eco system services and functions. Bio- Diversity

#### **UNIT IV: Environment Management system in Business Firm**

Life Cycle assessment, measuring environmental performance, Strategic Environmental

Management as Competitive Strategy. Reporting, Auditing, ISO- 14000.

#### **UNIT V: Climate Change**

Rio- Summit, Kyoto Protocol and other International Agreements, Paris summit; Carbon

## Budgeting, carbon Trading. Environment Policy of India: Objectives and Implementation.

### Readings

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

### Weekly Teaching Plan:

| Week   | Topic  |
|--------|--|
| Week 1 | The Economy and the Environment, Classical, Neo Classical & Ecological Perspective.                                      |
| Week 2 | Sustainable Development: concepts, Theories, strategies for Sustainable Development in different economics of the world. |
| Week 3 | Externalities: Public Goods, Market Failure, - Property Rights.  |
| Week 4 | Economic incentives for Environment Protection: Market Based instruments command and control Alternative Approaches.     |
| Week 5 | Environment impact Assessment: Valuation Techniques of Natural Resources.  |
| Week 6 | Eco System Functions, Climate change.  |



|         |   |
|---------|---|
| Week 7  | Climate Change: International Agreements: Montreal Protocol, Rio Summit, Kyoto Protocol.  |
| Week 8  | Climate Change: Paris Summit. Stern Review, Mitigation and Adaptive measures  |
| Week 9  | Environment Management system: (EMS) Strategies, Reporting, Auditing.   |
| Week 10 | EMS: Performance Evaluation, Corporate Social Responsibility, Life cycle Assessment, ISO 14000 (India and Global)                                 |
| Week 11 | Students Presentation   |
| Week 12 | Carbon Budgeting & Carbon Trading   |
| Week 13 | New Environment Policy of India. Environment Protection Act of India' Environment Protection Rules, Environment Standards, Environment Clearances |
| Week 14 | Bio- Diversity: Status, Measures for Protection .   |
| Week 15 | Students Presentations:   |

### Facilitating the achievement of course learning outcomes:

| UNIT | Course Learning Out comes   | Teaching & Learning Activity | Assessment Tasks  |
|------|---|------------------------------|---|
| 1    | Understanding the Basic concepts of Environmental Eco & sustainable Development   | Lectures                     | Problem Solving, Group Discussions                        |
| 2    | Understanding the different types of Economic incentives for Environment Protection.  | Lectures & Case Studies      | Problem Solving, Students, Presentations Group Discussion |
| 3    | Understanding the different valuation methods of Natural Resources. Also knowing about Eco- system Services & functions and Bio- Diversity conservation | Lectures & Case Studies      | Problem Solving, Students, Presentations Group Discussion |
| 4    | Understanding the Environment Management System at firm level   | Lectures & Case Studies      | Problem Solving, Students, Presentations Group Discussion |



|   |  |                         |   |
|---|--|-------------------------|---|
| 5 | Understanding different national & International Policies & Agreements to Protect Environment. | Lectures & Case Studies | Problem Solving, Students, Presentations Group Discussion |
|---|--|-------------------------|---|



## **424801205: BUSINESS FINANCE**

**Marks: 100**

**Duration: 60 hrs**

### **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.

### **Course Learning Outcomes:**

- Students will learn about basic concepts related to Time Value of Money, Investment Decisions, Cost of Capital and Estimation of Cash Flows
- Students will be familiar with issues related to Working Capital Management and Business Financing
- Students will have basics knowledge of Financing and Dividend Decisions and Sources of Long-Term Funds

### **Contents:**

#### **Unit I: 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.

#### **Unit II: Time Value of Money and Investment Decisions:**

Concept of Time Value of Money; Compound Value; Present Value; Annuity; Perpetuity; Applications of concepts; Valuation of securities; Use of MS Excel functions.

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.

### **Unit III: Estimation of Cash Flows, Cost of Capital and Market Efficiency:**

Meaning of Cash Flows - Profits vs. Cash Flows; Cash Flow estimation Process; Basic principles of Cash Flows estimation; Biases in cash flow estimation. 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. Concept of Market efficiency, Forms of market efficiency, efficient markets and implications of efficient markets.

### **Unit IV: Financing Decisions, Sources of Long-Term Funds and Dividend Decision:**

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. 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. 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.

### **Unit V: Working Capital Management-Overview and Working Capital Financing:**

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. Bank Financing – Norms and procedure; Assessment methods of Working Capital requirements by Banks; Instruments of Working Capital Financing in India

### **Unit VI: 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.

### 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.

### Weekly Teaching Plan:

| Week    | Topic  |
|---------|--|
| Week 1  | Introduction and Overview of Indian Financial System |
| Week 2  | Time value of money                                  |
| Week 3  | Investment Decisions                                 |
| Week 4  | Estimation of Cash Flows                             |
| Week 5  | Cost of Capital                                      |
| Week 6  | Market Efficiency                                    |
| Week 7  | Financing Decisions                                  |
| Week 8  | Group Project and Student Presentations              |
| Week 9  | Sources of Long Term Funds                           |
| Week 10 | Dividend Decision                                    |
| Week 11 | Overview of Working Capital Management               |
| Week 12 | Working Capital Financing                            |
| Week 13 | Managing Cash  |
| Week 14 | Managing Inventory and Receivables                   |
| Week 15 | Group Project and Student Presentations              |

## Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes   | Teaching and Learning Activity | Assessment Tasks                                     |
|----------|--|--------------------------------|--|
| 1.       | Basic understanding of business finance and overview of Indian financial system  | Lectures                       | Group discussion, Student Presentation               |
| 2.       | Learning about time value of money and factors underlying investment decisions   | Lectures, case studies         | Problem solving, Student Presentation, Group Project |
| 3.       | Learning to estimate cash flows, about cost of capital and understanding the essence of market efficiency                | Lectures, case studies         | Problem solving, Student Presentation, Group Project |
| 4.       | Understanding the drivers of firms' financing and dividend decisions and learning about their sources of long term funds | Lectures, case studies         | Problem solving, Student Presentation, Group Project |
| 5.       | Learning about Working capital management and financing  | Lectures, case studies         | Problem solving, Student Presentation, Group Project |
| 6.       | Understanding the essence of management of cash, inventories and receivables by firms                                    | Lectures, case studies         | Problem solving, Student Presentation, Group Project |



## **484201206: BASIC ECONOMETRICS**

**Marks: 100**

**Duration: 60 hrs**

### **Course Objective:**

The course seeks to develop skills related to application of econometric methods and provide an introduction to data analytics involving model estimation and testing. It equips students with basic econometric tools for analyzing cross-section and time-series data using specialized software.

### **Course Learning Outcomes:**

- Students will learn to carry out Estimation, Hypotheses Testing using Alternate Model Specifications in Simple and Multiple Regression Models and interpret results.
- Students will be able to handle the problem of Multicollinearity in Regression Models
- Students will be able to handle Models with Binary Explanatory Variables
- Students will be able to handle the problems of Heteroskedasticity and Autocorrelation in Regression Models
- Students will learn to use standard firm level and cross-country databases (e.g., Capitaline/Prowess; World Development Indicators) and carry out econometric analysis using specialized software.

### **Contents:**

#### **Unit I: Simple 2-variable Linear Regression Model :**

Assumptions, Estimation and Interpretation of Coefficients, Properties of Estimators (the Gauss-Markov Theorem), Hypotheses Testing; Constrained vs Unconstrained Models; Concept of R-squared.

#### **Unit II :Multiple Linear Regression Model :**

Assumptions, Estimation and Interpretation of Coefficients, Properties of Estimators (the Gauss-Markov Theorem), Hypotheses Testing (including Joint



Tests (t and F tests), tests of Linear Combination of Parameters, tests of Multiple Linear Restrictions, Exclusion restrictions etc.); Concept of Adjusted R-squared

### **Unit III: Alternate Functional Forms and Dummy Variables:**

Model specification and Interpretation of coefficients in Models with : Dependent and / or Explanatory Variables in Logarithmic form; Standardized Dependent and Explanatory Variables (Beta Coefficients); Quadratic Terms; Interaction Terms; Single and Multiple Dummy explanatory variables and Dummy Interaction Terms.

### **Unit IV: The problem of Multicollinearity:**

Nature, Consequences, Detection techniques and remedial measures.

### **Unit V: The problem of Heteroskedasticity:**

Nature, Consequences, Detection techniques and remedial measures.

### **Unit VI: The problem of Autocorrelation:**

Nature, Consequences, Detection techniques and remedial measures.

### **Readings:**

- Dougherty Christopher (2011), Introduction to Econometrics, Oxford University Press (Latest edition).
- Gujarati D. N. and D.C. Porter (2009), Essentials of Econometrics, 4<sup>th</sup> Edition, McGraw Hill (Latest edition).
- Kmenta Jan (2008) ,Elements of Econometrics, Indian Reprint, Khosla Publishing House.
- Maddala, G.S. and Kajal Lahiri (2009), Introduction to Econometrics, John Wiley & Sons Ltd (Latest edition).
- Ramanathan, R. (2002), Introductory econometrics with applications, Cengage Learning (Latest edition)..
- Wooldridge, J.M. (2012), Introductory econometrics: A modern approach, Cengage Learning (Latest edition).
- **Databases** : Firm-level database such as Capitaline or Prowess; Cross-country database such as World Development Indicators; UN National Accounts Statistics.



## Teaching Plan:

| Week    | Topic   |
|---------|---|
| Week 1  | Assumptions, Estimation and Interpretation of coefficients in the 2 variable Linear Regression Model                                |
| Week 2  | Properties of Estimators and Hypotheses Testing in the 2 variable Linear Regression Model   |
| Week 3  | Assumptions, Estimation and Interpretation of coefficients in the Multiple Linear Regression Model                                  |
| Week 4  | Properties of Estimators and Hypotheses Testing in the Multiple Linear Regression Model – tests of Linear combination of parameters |
| Week 5  | Hypotheses Testing in the Multiple Linear Regression Model – tests of Multiple Linear Restrictions, Exclusion Restrictions etc.     |
| Week 6  | Internal Test 1; Models with Alternate Functional Forms – Models with Log dependent and Explanatory Variables                       |
| Week 7  | Models with Beta coefficients, Quadratic and Interaction Terms  |
| Week 8  | Models with Single and Multiple Dummy Explanatory Variables   |
| Week 9  | Models with Dummy Interaction Terms   |
| Week 10 | The Problem of Multicollinearity – Detection, Consequences and Remedial Measures; Concept of Partial Correlation                    |
| Week 11 | Internal Test 2; The problem of Heteroskedasticity – Detection  |
| Week 12 | The problem of Heteroskedasticity –Consequences and Remedial Measures   |
| Week 13 | The problem of Autocorrelation – Detection and Consequences   |
| Week 14 | The problem of Autocorrelation – Remedial Measures  |
| Week 15 | Submission of Empirical Project, Presentations and Viva   |

## Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes   | Teaching and Learning Activity               | Assessment Tasks                              |
|----------|--|--|---|
| 1.       | Estimation, Hypotheses testing and Interpretation of results in the 2 variable linear regression model | Lectures and Model estimation using software | Classroom Quiz, Test and Computer Assignments |

|    |  |  |  |
|----|--|--|--|
|    | using software packages  |  |  |
| 2. | Estimation, Hypotheses testing and Interpretation of results in the Multiple linear regression model using software packages                         | Lectures and Model estimation using software | Classroom Quiz, Test, Computer Assignments and Empirical Project |
| 3. | Estimation of Models and Interpretation of results in models with Alternate functional forms and Dummy Explanatory Variables using software packages | Lectures and Model estimation using software | Classroom Quiz, Test, Computer Assignment and Empirical Project  |
| 4. | Detection and fixes for the problem of Multicollinearity using software packages   | Lectures and Model estimation using software | Classroom Quiz, Test, Computer Assignment and Empirical Project  |
| 5. | Detection and fixes for the problem of Heteroskedasticity using software packages  | Lectures and Model estimation using software | Classroom Quiz, Test, Computer Assignment and Empirical Project  |
| 6. | Detection and fixes for the problem of Autocorrelation using software packages   | Lectures and Model estimation using software | Classroom Quiz, Test, Computer Assignment and Empirical Project  |



## **424801207: LEADERSHIP AND ORGANIZATION**

**Marks: 100**

**Duration: 60 hrs**

### **Course Objectives:**

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.

### **Course Outcomes:**

- Understand the leaders and their role in Organizations
- Basics of organization behavior with respect to individual behavior at work, power and politics in organization, organizational culture, stress and conflict management.
- Introduction to Organizational change and development and organizational learning

### **Contents:**

#### **Unit 1: Introduction to leadership concepts**

Definition and nature of Leadership; Theories of Leadership; Courage and moral leadership; Followership ; Leading Teams; Developing leadership diversity ; Strategic leadership

#### **Unit 2: Leadership and Management**

Comparison between management and leadership ; Leader capacity vs. competence ; Courage and moral leadership; Followership ; Leading Teams; Shaping culture and values; Leading learning organizations ; Leading change

#### **Unit 3: Organizational Behavior**

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

#### **Unit 4: Organizational Change and Development**

Power and politics in organization; organizational culture; stress and conflict management

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

## Suggested Readings:

- 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,Tata Mc Graw 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

## Weekly Plan:

|               |  |
|---------------|--|
| <b>Week 1</b> | Introduction to basic concepts of leadership   |
| <b>Week 2</b> | Theories of leadership, types of leadership: Courage and moral leadership, strategic leadership etc. |
| <b>Week 3</b> | Comparison between leadership and management   |
| <b>Week 4</b> | Leading change, development of leadership diversity  |
| <b>Week 5</b> | Case Studies   |
| <b>Week 6</b> | Introduction to organization behavior  |
| <b>Week 7</b> | Importance of team dynamics and team work  |
| <b>Week 8</b> | Team building activities   |
| <b>Week 9</b> | Organizational Processes: leadership and communication   |

|                |  |
|----------------|--|
| <b>Week 10</b> | Organizational culture and politics  |
| <b>Week 11</b> | Mid Term Assessment  |
| <b>Week 12</b> | Students Presentations   |
| <b>Week 13</b> | Stress and Conflict Management; Organizational learning and Transaction analysis |
| <b>Week 14</b> | Organizational change and development  |
| <b>Week 15</b> | Personal growth and Students Presentations                                       |

### Learning Outcomes:

| <b>Unit Number</b> | <b>Course Learning Outcome</b>   | <b>Teaching and Learning Activity</b>           | <b>Assessment Tasks</b>              |
|--------------------|--|---|--------------------------------------|
| <b>Unit 1</b>      | Understanding the basic concepts of leadership, types of leadership and their interactions | Lecture/ Case Studies                           | Presentations/ Mid Term              |
| <b>Unit 2</b>      | Analyzing the difference in leadership and management and related aspects                  | Lecture/ Student Presentations                  | Presentations/ Mid Term              |
| <b>Unit 3</b>      | Understanding organizational behavior and team building approaches                         | Lecture/ Case studies/ Team Building activities | Presentations/ Team work performance |
| <b>Unit 4</b>      | Understanding organizational change and behavior and focusing on personal growth           | Lecture/ Case studies/ Presentations            | Presentations/ Mid Term              |

**Semester III**  
**(Compulsory Courses)**  
**Annexure II**

| Semester III |  |                                 |          |           |
|--------------|--|---------------------------------|----------|-----------|
|              |  | Credits in each core course     |          |           |
| S. no.       | Name of Core Courses   | Theory                          | Tutorial | Total     |
| 1            | Business, Government & Society                               | 4                               | 0        | 4         |
| 2            | International Financial System                               | 4                               | 0        | 4         |
|              | <i>Total Credit in Core Course</i>                           |                                 |          | <b>8</b>  |
|              |  | Credits in each elective Course |          |           |
|              | Name of Elective Courses                                     | Theory                          | Tutorial | Total     |
| 1            | Elective 1   | 4                               | 0        | 4         |
| 2            | Elective 2   | 4                               | 0        | 4         |
| 3            | Elective 3   | 4                               | 0        | 4         |
|              | <i>Total Credit in Elective Course</i>                       |                                 |          | <b>12</b> |
|              |  | Credits in Open elective        |          |           |
|              | Name of the Open Electives                                   | Theory                          | Tutorial | Total     |
| 1            | Open Elective 1  | 4                               | 0        | 4         |
|              | <i>Total Credit in Open Elective Course</i>                  |                                 |          | 4         |
| 1            | <b>Masters Dissertation</b>                                  | 4*                              | 0        | 4*        |
|              | • Evaluation to be carried out at the end of Fourth Semester |                                 |          |           |
|              | <i>Total Credit in Semester III</i>                          |                                 |          | <b>24</b> |



### Paper Code Details

| <b>S. No</b> | <b>Unique Paper Code</b> | <b>Title</b>                                   | <b>Nature of Paper</b> |
|--------------|--------------------------|--|------------------------|
| 1            | 424801301                | Business, Government & Society                 | Compulsory             |
| 2            | 424801302                | International Financial System                 | Compulsory             |
| 3            | 424801303                | Research Project                               | Compulsory             |
| 4            | 424802301                | Advanced Econometrics                          | Optional               |
| 5            | 424802302                | Time Series Analysis and Business Forecasting  | Optional               |
| 6            | 424802305                | Strategic Marketing                            | Optional               |
| 7            | 424802306                | Marketing Research                             | Optional               |
| 8            | 424802310                | Financial Derivatives                          | Optional               |
| 9            | 424802311                | Investment and Portfolio Theory and Management | Optional               |



## 484201301: BUSINESS, GOVERNMENT AND SOCIETY

**Marks: 100**

**Duration: 60 hrs**

**Course Objective:** The objective of this course is to provide an overview regarding the impact of government, public policy and society on functioning of the corporates. The students should be able to understand the impact of ethics, environment protection and CSR on businesses in the global environment.

### **Course Learning Outcomes:**

The main learning outcomes are expected as follows:

- Examine the political, regulatory, societal, cultural, and natural factors that shape business' nonmarket environment.
- Understand the changing environment for businesses and factors responsible for them.
- Understand concepts of corporate governance and its evolution.
- Analyse and compare various regulatory framework affecting the corporate governance across globe.
- Contemplate corporate governance issues in various financial and corporate scams
- Develop understanding regarding public policy and government regulations.
- Enable the development of a sound understanding of Corporate Social Responsibility (CSR), its evolution and relevance;
- Integrate corporate governance aspects, economic viability and CSR and ethics.

### **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. 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

**3. Corporate Governance:** Corporate and its features, Corporate Governance-Meaning, importance and significance; Good corporate governance, Drivers of Corporate Governance; Corporate Governances theories and models, Corporate governance issues, Overview of Companies Act 2013, Corporate Governance in India, Role of Board in Corporate Governance, Corporate scams, Corporate Governance in various countries and Institutional framework- codes and committees of corporate governance around the globe, e-governance.

**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, ethical decision making, unethical issues in context of business, ethical organizations.

**5. Corporate Social Responsibility:** Types and nature of social responsibilities, CSR principles and strategies, models of CSR, Need of CSR, Arguments for and against CSR, Best practices of CSR, CSR Indian perspective; Evolution of CSR- from philanthropy to CSR and strategic alliance.

**6. 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.

### **Suggested Readings:**

- AC Fernando, 2009 : Business Ethics: An Indian Perspective, Pearson
- A C Fernando, 2011: Corporate Governance: Principles, Policies and Practices, Pearson
- Boatright 2007, Ethics and the conduct of Business, fifth edition, Pearson pub
- Bob Tricker, 2015: Corporate Governance: Principles, Policies, And Practices, Third Edition, Oxford



- Clarke, T. (2016). “The continuing diversity of corporate governance: Theories of convergence and variety”. *Ephemera : Theory and Politics in Organization*, 16 (1): 19 – 52. University of Leicester, University of Essex, <http://hdl.handle.net/10453/43363>
- 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](http://www.ted.com/talks/lang/en/tim_brown_urges_designers_to_think_big.html)

## Weekly Teaching Plan:

|   |
|---|
| Week 1- Relationship among Business, Government and Society(BGS): Importance of Business, Government and Society to Managers, Models of BGS relationships.  |
| Week 2- 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.                                |
| Week 3- 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. |
| Week 4- 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.  |
| Week 5- Corporate and its features, Corporate Governance- Meaning, importance and significance; Good corporate governance, Drivers of Corporate Governance; Corporate Governances theories and models.  |
| Week 6- Corporate governance issues, Overview of Companies Act 2013, Corporate Governance in India, Role of Board in Corporate Governance.  |
| Week 7- Corporate scams with case studies   |
| Week 8- Corporate Scams with case studies, Corporate Governance in various countries  |
| Week 9- Corporate governance- Institutional Framework around the globe, e-governance  |
| Week 10- 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, ethical decision making, unethical issues in context of business,                            |
| Week 11- Ethical organizations and case studies relating to ethics in business. Concept of CSR, Need and Importance of CSR.   |
| Week 12- Arguments for and against CSR , Types and nature of social responsibilities, CSR principles and strategies, models of CSR, Evolution of CSR- from philanthropy to CSR and strategic alliance.  |
| Week 13- Best practices of CSR with case studies, CSR Indian perspective.   |

Week 14- History of environmentalism, environmental preservation-role of stakeholders, international issues, sustainable development, costs and benefits of environmental regulation, industrial pollution.

Week 15- Role of corporate in environmental management, waste management and pollution control, key strategies for prevention of pollution, environmental audit, Laws governing environment.

### Course Learning Outcomes

| Unit No.                | Course Learning Outcomes  | Teaching and Learning Activity                             | Assessment Tasks                  |
|-------------------------|---|--|-----------------------------------|
| 1. Political Economy    | Examine the political, regulatory, societal, cultural, and natural factors that shape business' nonmarket environment. Understand the changing environment for businesses and factors responsible for them. | Lecture, Presentations, group discussions,                 | Class participation, Written test |
| 2. Public Policy        | Develop understanding regarding public policy and government regulations.   | Lecture, Presentations, group discussions                  | Class participation, written test |
| 3. Corporate Governance | Understand concepts of corporate governance and its evolution, corporate scams  | Lecture, Presentations, group discussions and Case studies | Written Test, Class participation |

|  |   |  |   |
|--|---|--|---|
|  | and regulatory framework.   |  |   |
| 4. Business Ethics                         | Understand the purpose and importance of ethics in business.                                | Lecture, Presentations, Videos, Case Studies | Written Test, Class participation               |
| 5. Corporate Social Responsibility         | Develop understanding of Corporate Social Responsibility (CSR), its evolution and relevance | Lecture, Presentations, Videos, Case studies | Written Test, Class participation               |
| 6. Environmental concerns and corporations | Understand the environmental impact on businesses and economic viability.                   | Lecture, Presentations, group discussions    | Class participation, Case studies, written test |



## 424801302: INTERNATIONAL FINANCIAL SYSTEM

**Marks: 100**

**Duration: 60 hrs**

**Course Objectives:** 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.

### **Course Learning Outcomes:**

- Functioning of a globally open economy.
- Determination of exchange rate and its relationship with the Balance of Payments(BOP)
- Temporal analysis of global capital flow under different monetary systems.
- Genesis of different types of crisis associated with the exchange rate and the response of multilateral financial institutions.

### **Syllabus:**

#### **Unit I: 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, Marshal-Lerner condition and J-curve; Purchasing power parity.; Covered and Uncovered Interest Parity Conditions, Real Interest Rates and Yield Curve

**Unit II: 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-19<sup>th</sup> century onwards. The policy Trilemma - fixed exchange rates, unrestricted capital flows and policy independence.



### **Unit III: Exchange rates, External Crises and Global Capital Flows:**

International monetary system - Past, present and future (Gold Standard, Inter-war period and Bretton wood system).

**Unit IV: Analyzing Economic Crises:** Country experiences with Fixed exchange rates and external crises: e.g., Mexican Crises, East Asian Crisis etc; 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.

**Unit V: Role of Multilateral institutions:** Policy responses to external crises (e.g., IMF, New development Bank, Asia-infrastructure Bank, G-8 and G-20 etc.).

#### **Suggested 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.

## Teaching Plan:

|         |  |
|---------|--|
| Week 1: | Open Economy Macroeconomic Identity; Relation between Fiscal Deficit, Current Account Deficit and Gap between National Savings and Investment.   |
| Week 2: | Balance of Payments Accounts. Exchange rate determination; Real Exchange Rates; Fixed and flexible exchange rate.  |
| Week 3: | Marshal-Lerner condition and J-curve Purchasing power parity; Covered and Uncovered Interest Parity Conditions.  |
| Week 4: | Real Interest Rates and Yield Curve. Importance and Policy Implications.   |
| Week 5: | Benefits and drawbacks of unrestricted global capital flows; The policy Trilemma - fixed exchange rates.   |
| Week 6: | Student's Presentations on the functioning of Open Economy; taking country specific case study.  |
| Week 7: |  |
| Week 8: | Unrestricted capital flows and policy independence. International monetary system - Past, present and future (Gold Standard, Inter-war period and Bretton wood system).  |
| Week 9: | Country experiences with Fixed exchange rates and external crises: e.g., Mexican Crises, East Asian Crisis etc.  |
| Week10: | Characterizing different types of crises (e.g., Sovereign debt crisis, Currency crisis, Financial crisis) using case studies of sub-prime crisis,  |
| Week11: | European debt crisis, Global Financial crisis; Inter-relations among different kinds of crises.  |
| Week12: | Causes of external crises; policy responses to external Crises. Role of Multilateral institutions: policy responses to external crises (e.g., IMF, New development Bank, Asia-infrastructure Bank, G-8 and G-20 etc.). |
| Week13: | Role of Multilateral institutions: policy responses to external crises (e.g., IMF, New development Bank, Asia-infrastructure Bank, G-8 and G-20 etc.).   |
| Week14: | Student's Presentations on the country specific cases of Debt Crisis.  |
| Week15: |  |



## Learning Outcomes

| Unit Number | Course Outcome   | Learning | Teaching and Learning Activity | Assessment Tasks  |
|-------------|--|----------|--------------------------------|---|
| 1.          | Determination of exchange rate in fixed and flexible exchange rate regime. |          | Lectures, case studies         | Problem solving, Group discussion, Student Presentation |
| 2.          | Pros and cons of global capital flow and the issues related with.          |          | Lectures, case studies         | Problem solving, Group discussion, Student Presentation |
| 3.          | Global capital flow under different monetary system.                       |          | Lectures, case studies         | Problem solving, Group discussion, Student Presentation |
| 4.          | Emergence of financial Crises: causes and remedies.                        |          | Lectures, case studies         | Problem solving, Group discussion, Student Presentation |
| 5.          | Role of multilateral institutions in mitigating the Crisis.                |          | Lectures, case studies         | Problem solving, Group discussion, Student Presentation |

## Semester IV

### (Compulsory Courses)

| <b>Semester IV</b>   |                             |  |          |             |
|--|-----------------------------|--|----------|-------------|
|  |                             | <b>Credits in each core course</b>     |          |             |
| S. no.   | Name of Core Courses        | Theory                                 | Tutorial | Total       |
| 1  | Contemporary Indian economy | 4                                      | 0        | 4           |
| 2  | Strategic Management        | 4                                      | 0        | 4           |
| <i>Total Credit in Core Course</i>   |                             |  |          | 8           |
|  |                             | <b>Credits in each elective Course</b> |          |             |
|  | Name of Elective Courses    | Theory                                 | Tutorial | Total       |
| 1  | Elective 1                  | 4                                      | 0        | 4           |
| 2  | Elective 2                  | 4                                      | 0        | 4           |
| 3  | Elective 3                  | 4                                      | 0        | 4           |
| <i>Total Credit in Elective Course</i>   |                             |  |          | 12          |
|  |                             | <b>Credits in Open elective</b>        |          |             |
|  | Name of the Open Electives  | Theory                                 | Tutorial | Total       |
| 1  | Open Elective 1             | 4                                      | 0        | 4           |
| <i>Total Credit in Open Elective Course</i>                                      |                             |  |          | 4           |
| 1  | <b>Masters Dissertation</b> | 4                                      | 0        | 4           |
| ** Includes 4 credits for the Research Project carried out in the Third Semester |                             |  |          |             |
| <i>Total Credit in Semester IV</i>   |                             |  |          | <b>32**</b> |

### Pape Code Details

| <b>S. No</b> | <b>Unique Paper Code</b> | <b>Title</b>   | <b>Nature of Paper</b> |
|--------------|--------------------------|--|------------------------|
| 1            | 424801401                | Contemporary Indian Economy                              | Compulsory             |
| 2            | 424801402                | Strategic Management                                     | Compulsory             |
| 3            | 424801403                | Research Project   | Compulsory             |
| 4            | 424802403                | Topics in Game Theory                                    | Optional               |
| 5            | 424802404                | Simulation and Modelling in Business Management          | Compulsory             |
| 6            | 424802412                | Corporate Restructuring, Mergers & Acquisitions          | Compulsory             |
| 7            | 424802413                | Credit and Risk Management/<br>Financial Risk Management | Compulsory             |
| 8            | 424802408                | International Marketing                                  | Compulsory             |
| 9            | 424802407                | Logistics and Supply Chain Management                    | Compulsory             |



## 424801401: CONTEMPORARY INDIAN ECONOMY

**Marks: 100**

**Duration: 60 hrs**

### **Course Objectives:**

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 discusses the sectoral balances and key issues in financial and external sectors of the economy.

### **Course Outcomes:**

- Introduction to Major **Changes in the Indian Economy and the problems of Inter-sectoral balance**
- Discuss the main **Challenges of development**, including Poverty, education, unemployment, SDG (Sustainable development goals) and Demographic dividend
- Basic Issues related to the Financial Sector and the External Sector in India
- In-depth analysis of problems of Public Finance in the Indian context

### **Contents:**

#### **Unit 1: Changes in the Indian Economy**

Analyzing the structure and growth of the Indian economy

#### **Unit 2: Inter-sectoral balance**

Agriculture, industry and infrastructure; service sector led growth

#### **Unit 3: Challenges of development**

Poverty; education; unemployment; MDG (Millennium development goals); SDG (Sustainable development goals); Demographic dividend.

#### **Unit 4: Financial Sector**

Indian financial sector: its structure and reforms, Monetary Policy, Capital Market: its growth, problems and reforms.

#### **Unit 5: Public Finance**

Fiscal Imbalances in the Indian Economy, Sustainability of public Debt  
Fiscal Deficits in Central and State



## Unit 6: External Sector

Analysis of trade policy in post reform period, Liberalized exchange rate system, Trend and problems of Foreign Direct Investment and Foreign Institutional investment in India, WTO and India

### Suggested Readings:

- Acahya 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 Raju and L M Pandey, (2007) Growth crisis in agriculture , EPW Vol. 42.
- Chandrasekhar, Ghosh and Anamitra Roychowdhury (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 India since 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, New Delhi, Oxford University Press.

### Weekly Plan:

|         |   |
|---------|---|
| Week 1  | An introduction to the structure and changes in the Indian Economy & Key drivers of growth and employment                                   |
| Week 2  | Brief Background of the three sectors of the economy : Agriculture, Services and Manufacturing & Growth and Employment in the three sectors |
| Week 3  | Understanding the Inter Linkages between the sectors  |
| Week 4  | Crucial Development Indicators: Education, HDI , Health status across different groups etc.   |
| Week 5  | Detailed study of social problems like Poverty, Inequality etc.   |
| Week 6  | Student's Presentations: Covering the recent trends in growth and Development   |
| Week 7  |   |
| Week 8  | Introduction to the Financial Sector: growth and Reforms & Capital Markets: Regulations and Functioning                                     |
| Week 9  | Monetary Policy in India: Reforms and Analysis  |
| Week 10 | Fiscal Imbalances in the Economy  |
| Week 11 | Fiscal Policy in India and Sustainability of Public Debt  |
| Week 12 | Tax Reforms and Implications & Mid Term Exam  |
| Week 13 | Importance of Trade & Trade relations with other countries  |
| Week 14 | Student's Presentations: A brief analysis of the recent Economic Survey and Budget  |
| Week 15 |   |

### Learning Outcomes:

| Unit Number | Course Learning Outcome   | Teaching and Learning Activity    | Assessment Tasks       |
|-------------|---|-----------------------------------|------------------------|
| Unit 1      | Developing awareness about the structure and changes in the Indian Economy      | Lecture                           | Mid Term Exam          |
| Unit 2      | Understanding inter linkages in the sectors of the economy                      | Lecture / Student's Presentations | Student Presentation 1 |
| Unit 3      | Analyzing the key issues in Indian Economic Development                         | Lecture / Class Discussion        | Student Presentation 1 |
| Unit 4      | Developing a knowledge about the Financial Sector and Trends in Monetary Policy | Lecture                           | Mid Term Exam          |



|        |  |                           |           |                        |
|--------|--|---------------------------|-----------|------------------------|
| Unit 5 | Understanding Federal structure and major reforms in tax reforms and Comparison of Fiscal and Monetary tools | Lecture/<br>Discussion    | Class     | Mid Term Exam          |
| Unit 6 | Understanding the historical trade relations and recent trade linkages                                       | Lecture/<br>Presentations | Student's | Student Presentation 2 |





## **424801402:STRATEGIC MANAGEMENT**

**Marks: 100**

**Duration: 60 hrs**

### **Course Objective:**

The course seeks to provide sense of strategic orientation and build strategic analytical skills and capabilities in the corporate level decision making with focus on applications, especially in context of emerging economies like India

### **Course Learning Outcomes:**

- Understand and appreciate the importance of the top management decision making in business which includes determination and formulation of Objectives and vision
- Analysis and evaluate business environment, internal strength weaknesses and identifying competitive advantage
- Understand the business and its ecosystem to develop business models for successful operation and growth
- Developing and implementing business strategies, corporate strategies and their evaluation and control
- Provide thorough training in Case Study based analysis

### **Content**

#### **Unit 1 Strategy and Vision**

Globalised business environment: Challenges and issues. Strategy and Concepts: Strategy, Strategic Planning, evolution of strategy. Vision and strategist: Vision, mission, strategic intent, formulation of Vision

#### **Unit II Strategic Analysis: External and Internal**

External Environment Analysis: Technological change, Globalisation, Competition, Climate change issues; SWOT , industry analysis, strategic groups, competitors, profit pools concept and tools. Internal Analysis: Resources, capabilities, knowledge management, Value Chain .

#### **Unit III Industry Ecosystem and Business Model**

Ecosystem Concept and utility in globally connected and competitive world, Business Model, Business Model Renewal and Innovation

## **Unit IV Competitive Advantage and Strategies**

Understanding and Sustaining Competitive advantage; Competitive advantage and strategies in different industrial settings, matured industries; Blue ocean strategies and value innovation; and Knowledge creation and Innovation Management

## **Unit V corporate strategies**

Corporate strategies and portfolio analysis; strategies for expansion and growth; strategies for international/global industries; strategic alliances, M&A

## **Unit VI Strategic Change and Implementations**

Strategy implementation: structure, systems, resource allocation, leadership, balanced scorecard. Strategy evaluation and control: strategic information systems. Strategic 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
- 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,(1996) “What is Strategy?” Harvard Business Review, November-December 1996
- Michael Porter,(2008) “The Five Competitive Forces That Shape Strategy,” Harvard Business Review, January 2008

- Pankaj Ghemawat, (2001) "Distance Still Matters: The Hard Reality of Global Expansion," Harvard Business Review, September 2001
- Richard Rumelt, "The Perils of Bad Strategy," McKinsey Quarterly
- Rita Gunther McGrath, "Transient Advantage," Harvard Business Review, October 2004
- Robert Grant, (2010): 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
- Robert S. Kaplan and David P. Norton, Strategic Management: An Emerging Profession," Balanced Scorecard Report, 2004
- W. Chan Kim and Renee Mauborgne, "Blue Ocean Strategy," Harvard Business Review, October 2004

### Weekly Teaching Plan:

| Week    | Topic   |
|---------|---|
| Week 1  | Globalised business environment: Challenges and issues. Strategy and Concepts: Strategy, Strategic Planning, evolution of strategy.   |
| Week 2  | Vision and strategist: Vision, mission, strategic intent, formulation of Vision   |
| Week 3  | External Environment Analysis: Technological change, Globalisation, Competition, Climate change issues; SWOT, industry analysis, strategic groups, competitors, profit pools concept and tools. |
| Week 4  | Internal Analysis: Resources, capabilities, knowledge management, Value Chain.  |
| Week 5  | Internal Assignment presentation I  |
| Week 6  | Ecosystem Concept and utility in globally connected and competitive world   |
| Week 7  | Business Model, Business Model Renewal and Innovation   |
| Week 8  | Understanding and Sustaining Competitive advantage; Competitive advantage and strategies in different industrial settings, matured industries   |
| Week 9  | Blue ocean strategies and value innovation; and Knowledge creation and Innovation Management  |
| Week 10 | Internal Assignment presentation II   |
| Week 11 | Corporate strategies and portfolio analysis; strategies for expansion and growth  |

|         |  |
|---------|--|
| Week 12 | strategies for international/global industries; strategic alliances, M&A   |
| Week 13 | Strategy implementation: structure, systems, resource allocation, leadership, balanced scorecard. Strategy evaluation and control: strategic information systems |
| Week 14 | Strategic change: turnaround and corporate regeneration, managing change.  |
| Week 15 | Internal Assignment presentation III   |

### Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes   | Teaching and Learning Activity                   | Assessment Tasks                                     |
|----------|--|--|--|
| 1.       | Understand and appreciate the importance of the top management decision making in business which includes determination and formulation of Objectives and vision | Lectures and case studies, Debate and discussion | Classroom Quiz, Written Assignment and presentations |
| 2.       | Analysis and evaluate business environment, internal strength weaknesses and identifying competitive advantage   | Lectures and case studies, Debate and discussion | Classroom Quiz, Written Assignment and presentations |
| 3.       | Understand the business and its ecosystem to develop business models for successful operation and growth   | Lectures and case studies, Debate and discussion | Classroom Quiz, Written Assignment and presentations |
| 4        | Developing and implementing  | Lectures and case studies,                       | Classroom Quiz, Written Assignment and               |



|  |  |                       |               |
|--|--|-----------------------|---------------|
|  | business strategies, corporate strategies and their evaluation and control | Debate and discussion | presentations |
|--|--|-----------------------|---------------|



Electives

(Group 1)

Quantitative Techniques in Business



## 424802301: ADVANCED ECONOMETRICS

**Marks: 100**

**Duration: 60 hrs**

### **Course objective:**

This course provides a good understanding about the advance concepts in econometrics. Students can apply the knowledge gain from this course to pursue their own empirical research and projects.

### **Course Learning Outcomes:**

- Students will be able to apply the basic as well as the advance concepts of econometrics on different verity of models, which are used when the linear model proves to be inadequate.
- Students will learn how to handle the computer programs to pursue the practical application of this course.

### **Contents:**

#### **Unit I: Panel Data Models**

Traditional panel data Models: Pooling cross sections across time, advantage of panel data, First difference, Fixed Effect, Random Effect, Test for pooling, Hausman Test, Hypothesis testing, Balanced and unbalanced panels. 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.

#### **Unit II: Instrument Variable Estimation**

Omitted variable problem, IV estimator, properties of IV estimator, 2SLS, Error in variable problem, Test for endogeneity, Applying 2SLS in panel data.

#### **Unit III: Simultaneous Equations Models**

Nature of SEM, Simultaneous bias, Identification problem, Estimating the structural equation, SEM with panel data.

#### **Unit IV: Limited Dependent Variable 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: Poisson Regression Model.

### Suggested 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), Micro econometrics: 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”, 2<sup>nd</sup> Edition, Cambridge, Mass. MIT Press.
- Wooldridge, J.M. (2012), “Introductory econometrics: a modern approach”, 5<sup>th</sup> Edition, Cengage Learning.

### Teaching Plan:

| Weeks  | Topics Covered  |
|--------|---|
| Week 1 | Traditional panel data Models, Pooling cross sections across time, advantage of panel data.                                   |
| Week 2 | First difference, Fixed Effect, Random Effect.  |
| Week 3 | Test for pooling, Hausman Test, Hypothesis testing, Balanced and unbalanced panels.   |
| Week 4 | Dynamic Heterogeneous Panels, Bias in the simple OLS estimators, FEM and REM and its solutions.                               |
| Week 5 | Bias of Heterogeneous slope parameters and its solutions, (Mean group (MG) and Pooled Mean Group (PMG)).                      |
| Week 6 | Non stationary panels, Panel Unit root tests: Levin and Lin test(LL), ImPesaran and Shin test (IPS), Mandala and Wu test(MW). |
| Week 7 | Panel cointegration tests: Kao test, McCoskey and kao test, Pedroni test , Larsson et al, test.                               |
| Week 8 | Omitted variable problem, IV estimator, properties of IV estimator.   |



|         |  |
|---------|--|
| Week 9  | 2SLS, Error in variable problem, Test for endogeneity, Applying 2SLS in panel data.                          |
| Week 10 | Nature of SEM, Simultaneous bias, Identification problem.  |
| Week 11 | Estimating the structural equation, SEM with panel data.   |
| Week 12 | Nature of qualitative response models, LPM (Linear Probability Model), Applications of LPM and its problems. |
| Week 13 | Logit Model and Probit Model.  |
| Week 14 | Tobit Model, Poisson Model   |
| Week 15 | Revision of the Course.  |

### Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes  | Teaching and Learning Activity   | Assessment Tasks  |
|----------|---|--|---|
|          | Students will be able to  |  |   |
| I        | <ul style="list-style-type: none"> <li>Differentiate between panel data and independent pooled data.</li> <li>Apply the different methods to estimate panel data models</li> </ul>  | <ul style="list-style-type: none"> <li>Lecture</li> <li>Practical Lab class</li> </ul> |   |
| II       | <ul style="list-style-type: none"> <li>Explain when to use the Instrument variable.</li> <li>Show how the Instrument variable solves the problem of endogeneity.</li> <li>Apply 2SLS method to estimate the parameter.</li> </ul> | <ul style="list-style-type: none"> <li>Lecture</li> <li>Practical Lab class</li> </ul> | <ul style="list-style-type: none"> <li>Two Class Tests</li> <li>Two Assignments</li> <li>1 Project</li> </ul> |
| III      | <ul style="list-style-type: none"> <li>Explain what simultaneous bias is.</li> <li>Judge whether the equation is identifiable or not.</li> <li>Show how to apply the concept of SEM in case of panel data.</li> </ul>             | <ul style="list-style-type: none"> <li>Lecture</li> <li>Practical Lab class</li> </ul> |   |



|    |  |   |  |
|----|--|---|--|
| IV | <ul style="list-style-type: none"><li>• Tell when we should use the limited dependent variable models.</li><li>• Explain the working of various limited dependent variable models.</li></ul> | <ul style="list-style-type: none"><li>• Lecture</li><li>• Practical</li><li>• Lab class</li></ul> |  |
|----|--|---|--|



## **424802302 : TIME SERIES AND BUSINESS FORECASTING**

**Marks: 100**

**Duration: 60 hrs**

### **Course Objective:**

The objective of this course is to teach students the importance of forecasting data in research and policy making at all levels: business, institution, government and international. This course aims to provide students with in- depth knowledge of quantitative techniques used for forecasting and their application. This includes techniques that range from moving averages and smoothing techniques to regression models, ARIMA (and related) models, VAR and VECM models, Artificial Neural Networks, Causality testing, and ARCH and GARCH models to test volatility.

### **Course Learning Outcomes:**

- Students will be able to understand the importance and use of forecasting data in research and policy making at all levels: business, institution, government and international.
- The students will be able to understand the theory and application of a wide range of forecasting techniques.

### **Contents:**

#### **Unit I: Forecasting Theory and Methods**

Overview and Types of Forecasts

#### **Unit II: Smoothing and Extrapolation of Time Series:**

Simple Extrapolation Models, Smoothing and Seasonal Adjustment

#### **Unit III: Properties of Stochastic Time Series:**

Characterizing Time Series: the Autocorrelation Function, Stationarity, Random Walk, Testing for Random Walks, Co-integrated Time Series

**Unit IV: 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



### **Unit V: Forecasting with Time Series Models:**

Computing a Forecast, The Forecast Error, Properties of ARIMA Forecasts

### **Unit VI: Causality and Exogeneity,**

VAR, Impulse Response Functions, Volatility Measurement, Modeling and Forecasting: The ARCH Process, The GARCH Process

### **Unit VII: Forecasting with a Single-Equation Regression Model:**

Unconditional Forecasting, Forecasting with Serially Correlated Errors, Conditional Forecasting

#### Readings:

- Box, George E.P., Gwilym M. Jenkins and Gregory C. Reinsel (2009) Time Series Analysis: Forecasting and Control 3<sup>rd</sup>Edn. Pearson Education.
- Box-Steffensmeier, Janet, John R. Freeman, Matthew P. Hitt and Jon C.W. Pevehouse (2014) Time Series Analysis for the Social Sciences. Cambridge University Press.
- Enders, Walter (2004) Applied Econometric Time Series. John Wiley and Sons.
- Evans, Michael K. (2003). Practical Business Forecasting. UK: Blackwell.
- Hanke, John E. and Dean W. Wichern (2005). Business Forecasting. 8<sup>th</sup>Edn. New Delhi: Pearson-Prentice Hall.
- Makridakis, Spyros, Steven C. Wheelwright and Rob J. Hyndman (1998). Forecasting: Methods and Applications. 3<sup>rd</sup>Edn. USA: John Wiley and Sons.
- Montgomery, Douglas, C., Cheryl L. Jennings, and Murat Kulahci (2015) Introduction to Time Series Analysis and Forecasting 2<sup>nd</sup> Edn. John Wiley and Sons.
- Pindyck, Robert S. and Daniel L. Rubinfeld. (1997). Econometric Models and Economic Forecasts. 3<sup>rd</sup>Edn. New York: McGraw Hill.
- Stock, James H. and Mark W. Watson (2014). Introduction to Econometrics. 3<sup>rd</sup>Edn. Pearson Education Addison Wesley

## Weekly Teaching Plan:

| Week    | Topic   |
|---------|---|
| Week 1  | Forecasting Theory and Methods: Overview and Types of Forecasts   |
| Week 2  | Smoothing and Extrapolation of Time Series: Simple Extrapolation Models, Smoothing $\square$ and Seasonal Adjustment  |
| Week 3  | Smoothing and Extrapolation of Time Series: Lab and Student Presentation  |
| Week 4  | Properties of Stochastic Time Series: Characterizing Time Series: the Autocorrelation Function, Stationarity Random Walk, Testing for Random Walks, Co-integrated Time $\square$ Series |
| Week 5  | Properties of Stochastic Time Series: Random Walk, Testing for Random Walks, Co-integrated Time Series  |
| Week 6  | Properties of Stochastic Time Series: Lab and Student Presentations   |
| Week 7  | Linear Time Series: Moving Average Models, Autoregressive Models, Mixed $\square$ Autoregressive and Moving Average Models  |
| Week 8  | Linear Time Series: Homogeneous Non-Stationary Processes: ARIMA Models, Box-Jenkins Methodology, Specification of ARIMA Models, SARIMA, ARMAX Models                                    |
| Week 9  | Linear Time Series: Lab and Student Presentations   |
| Week 10 | Forecasting with Time Series Models: Computing a Forecast, The Forecast Error, Properties of ARIMA Forecasts  |
| Week 11 | Forecasting with Time Series Models: Lab and Student Presentations  |
| Week 12 | Causality, Exogeneity, VAR, Impulse Response Functions, Volatility Measurement, Modeling and Forecasting: The ARCH Process, The GARCH Process   |
| Week 13 | Lab and Student Presentations   |
| Week 14 | Forecasting with a Single-Equation Regression Model: Unconditional Forecasting, $\square$ Forecasting with Serially Correlated Errors, Conditional Forecasting                          |
| Week 15 | Research Project Discussion and Submission  |

## Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes   | Teaching and Learning Activity | Assessment Tasks     |
|----------|--|--------------------------------|----------------------|
| 1.       | Understanding how to work with time series data—smoothing and extrapolation  | Lectures, Labs                 | Student Presentation |
| 2.       | Understanding the concept of stationarity, testing for random walk and cointegration                                     | Lectures, Labs                 | Student Presentation |
| 3.       | Understanding Homogeneous Non-Stationary Processes, Box-Jenkins Methodology, Specification of ARIMA SARIMA, ARMAX Models | Lectures, Labs                 | Student Presentation |
| 4.       | Understanding causality and volatility measurement (ARCH, GARCH)   | Lectures, Labs                 | Student Presentation |
| 5.       | Understanding Forecasting with a Single-Equation Regression Model  | Lectures, Labs                 | Student Presentation |

Research Project that involves application of various forecasting techniques



## 424802403: TOPICS IN GAME THEORY

**Marks: 100**

**Duration: 60 hrs**

### **Course objective:**

In this course we study the strategic behaviour of the rational decision makers. The main idea of teaching this course is to provide a comprehensive treatment of game theory with specific emphasis on applications in economics, management and politics.

### **Course Learning Outcomes:**

- Students will be able to relate the knowledge gained in this course with the real life examples.
- Students will be able to understand how the rational players take decisions in different game settings.

### **Contents:**

#### **Unit I: Strategic Games**

Various strategic games, Pure strategy Nash equilibrium, Best response functions, Dominated actions, Symmetric games and symmetric equilibria, Illustrations on strategic games, Mixed strategy Nash equilibrium.

#### **Unit II: Extensive Games with Perfect Information**

Extensive games with perfect information, Strategies and outcomes, Pure strategy Nash equilibrium, Subgame, Subgame perfect equilibrium, Backward induction, illustrations on extensive games, allowing for simultaneous moves, Bargaining games.

#### **Unit III: Bayesian Games**

Examples of Bayesian Games, Cournot's duopoly game with imperfect information, Providing a public good, Auctions.

#### **Unit IV: Extensive Games with Imperfect Information**

Strategies, Nash equilibrium, Beliefs and sequential equilibrium, Signaling games

#### **Unit V: Repeated Games**

Basic idea of repeated games, Finitely repeated games, Infinitely repeated games, Nash folk theorem.

#### **Unit VI: Coalitional Games**

The core, Coalitional game with and without transferable payoff, Exchange economies, Stable sets, Bargaining set, Shapley value, Nash solution .

### Suggested Readings:

- Dixit Avinash and Susan Skeath (2015), “Games of strategy”, W W Norton & Company, New York. London
- Fudenberg D. & 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. Whinston (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 (2016), “A Course in Game Theory”, Cambridge, Mass, MIT Press.
- Osborne Martin J(2012), “An Introduction to game theory”, Oxford University Press.
- Shubik M. (1982), “Game theory in the Social Sciences”, Cambridge, Mass, MIT Press.
- Webster Tomas.J. (2009), “Introduction to Game Theory in Business and Economics”, Segment Books.

### Teaching Plan:

| Weeks  | Topics Covered   |
|--------|--|
| Week 1 | Various strategic games, Pure strategy Nash equilibrium.   |
| Week 2 | Best response functions, Dominated actions, Symmetric games and symmetric equilibria.              |
| Week 3 | Illustrations on strategic games, Mixed strategy Nash equilibrium.                                 |
| Week 4 | Extensive games with perfect information, Strategies and outcomes, Pure strategy Nash equilibrium. |
| Week 5 | Subgame, Subgame perfect equilibrium, Backward induction.  |
| Week 6 | Illustrations on extensive games, allowing for simultaneous moves.                                 |
| Week 7 | Examples of Bayesian Games, Cournot’s duopoly game with imperfect information.                     |
| Week 8 | Providing a public good, Auctions.   |



|         |   |
|---------|---|
| Week 9  | Extensive Games with Imperfect Information, Strategies, Nash equilibrium.                               |
| Week 10 | Beliefs and sequential equilibrium, Signaling games.  |
| Week 11 | Basic idea of repeated games, Finitely repeated games.  |
| Week 12 | Infinitely repeated games, Nash folk theorem.   |
| Week 13 | Coalitional Games, the core, Coalitional game with and without transferable payoff, Exchange economies. |
| Week 14 | Stable sets, Bargaining games, Bargaining set, Shapley value, Nash solution.                            |
| Week 15 | Revision of the Course.   |

### Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes  | Teaching and Learning Activity   | Assessment Tasks   |
|----------|---|--|--|
|          | Students will be able to  |  |  |
| I        | <ul style="list-style-type: none"> <li>Explain how each player gets affected by the actions of the entire players in the game.</li> <li>Tell how each player achieves Nash equilibrium when every player tries to randomizes its action.</li> </ul> | <ul style="list-style-type: none"> <li>Lecture</li> <li>Solving Numerical Exercises</li> </ul> | <ul style="list-style-type: none"> <li>Class Test</li> <li>Assignment</li> </ul>           |
| II       | <ul style="list-style-type: none"> <li>Analyse how the player will take the decisions under a sequential move game.</li> <li>Identify the number of subgames and find out the subgame perfect equilibria.</li> </ul>                                | <ul style="list-style-type: none"> <li>Lecture</li> <li>Solving Numerical Exercises</li> </ul> | <ul style="list-style-type: none"> <li>Student will conduct a Game in the class</li> </ul> |
| III      | <ul style="list-style-type: none"> <li>Analyse and solve the static games where the players are not perfectly informed about the type of the other players.</li> </ul>  | <ul style="list-style-type: none"> <li>Lecture</li> <li>Solving Numerical Exercises</li> </ul> |  |
| IV       | <ul style="list-style-type: none"> <li>Explain how the player will move in a dynamic game where the players does not</li> </ul>   | <ul style="list-style-type: none"> <li>Lecture</li> <li>Solving Numerical</li> </ul>           |  |

|    |  |  |  |
|----|--|--|--|
|    | know the future moves planned by other players.  | Exercises  |  |
| V  | <ul style="list-style-type: none"> <li>Analyse the games where players have a long term interaction history.</li> <li>Solve the games where players not only consider the current behaviour but also the future behaviour of the other players.</li> </ul> | <ul style="list-style-type: none"> <li>Lecture</li> <li>Solving Numerical Exercises</li> </ul> | <ul style="list-style-type: none"> <li>Class Test</li> <li>Assignment</li> <li>Student will conduct a Game in the class</li> </ul> |
| VI | <ul style="list-style-type: none"> <li>Analyse such games where coalition (grouping) is possible.</li> <li>Give the solution concept for the coalitional games.</li> </ul>   | <ul style="list-style-type: none"> <li>Lecture</li> <li>Solving Numerical Exercises</li> </ul> |  |



## **424802404 : SIMULATION AND MODELING IN BUSINESS MANAGEMENT**

**Marks: 100**

**Duration: 60 hrs**

### **Course Objectives:**

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 Modeling as a course in business management helps in decision making under such conditions.

### **Course Outcomes:**

- Provides an introduction to Modelling & Simulation including Types of models Continuous – Discrete, Static – Dynamic, Deterministic etc. including advantages and disadvantages of Simulation.
- Students learn Validation and Verification of models and Financial modelling and Simulation Models
- Understand Marketing Models, Marketing Data and learn to work with big data

### **Contents:**

#### **Unit 1: Introduction to Modeling & Simulation**

Types of models, Continuous – Discrete, Static – Dynamic, Deterministic – Stochastic Advantages and disadvantages of simulation and modeling Steps of building a simulation model

#### **Unit 2: Probability Distribution**

Properties of Normal, Poisson and Uniform Distributions ; Random number generation; Generation of pseudo random number,

#### **Unit 3: Validation and Verification of models**

Methods used for verification and validation.

#### **Unit 4: Financial modeling and Simulation**

Modeling the Financial Markets- What to model and why, Introduction to financial modeling techniques. Application of simulation models to the Financial Markets.

#### **Unit 5: Marketing modeling and Simulation**

Marketing Models and Marketing Data ; Examples related to modeling marketing phenomena.

### Suggested Readings:

- Albright, S.C., W. L. Winston, and C. Zappe (1999) , Data Analysis and Decision Making, Duxbury
- Altiok, 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 Risk Optimizer, Palisade, 1999

### Weekly Plan:

|               |  |
|---------------|--|
| <b>Week 1</b> | Sample collection and Data Cleaning Methods  |
| <b>Week 2</b> | Distributions and their Properties   |
| <b>Week 3</b> | Data Problems : Treatment of outliers, Interpretation of Data Tables, Correct data presentation problems |
| <b>Week 4</b> | Session 1 : Data cleaning procedures and simple analysis using tables and graphs                         |
| <b>Week 5</b> | Introduction to Simulation, its advantages and procedures  |

|                |  |
|----------------|--|
| <b>Week 6</b>  | Types of Models in Simulation - Discrete, Dynamic etc. and steps to build a simulation Model   |
| <b>Week 7</b>  | Process of Random Number Generation and Introduction to Risk and Financial Modeling Techniques |
| <b>Week 8</b>  | Basic Econometric and Risk Models - concepts like Value at Risk etc.                           |
| <b>Week 9</b>  | Regression Models : Logit/ Probit/ Poisson Regressions   |
| <b>Week 10</b> | Mid Term 1: Descriptive Assessment of Students   |
| <b>Week 11</b> | Session 2: Interpreting large data sets,   |
| <b>Week 12</b> | Simple Modeling Techniques and regression analysis   |
| <b>Week 13</b> | Censored and Truncated Data Problems   |
| <b>Week 14</b> | Marketing Models using regression Analysis and Validation Exercises                            |
| <b>Week 15</b> | Mid Term 2: Project Presentations  |

### Learning Outcomes:

| <b>Unit Number</b> | <b>Course Outcome</b>   | <b>Learning</b> | <b>Teaching and Learning Activity</b>   | <b>Assessment Tasks</b> |
|--------------------|---|-----------------|---|-------------------------|
| <b>Unit 1</b>      | Understanding basic data procedures, identifying data problems, understanding Simulation Models |                 | Lecture/ practical                      | Lab Exam                |
| <b>Unit 2</b>      | Understanding types of probability distributions and their applications for data analysis       |                 | Lecture/ Class Assignments/Case Studies | Mid Term                |
| <b>Unit 3</b>      | Ability to verify and validate models   |                 | Lecture/ practical                      | Lab Exam                |
| <b>Unit 4</b>      | Understanding Financial Modeling Techniques and Procedures                                      |                 | Lecture/ practical                      | Mid Term/ Lab Exam      |
| <b>Unit 5</b>      | Marketing Models  |                 | Lecture/Case Studies/ Assignments       | Presentations/Lab Exam  |



Electives

(Group 2)

Marketing and Distribution



## **424802305 : STRATEGIC MARKETING**

**Marks: 100**

**Duration: 60 hrs**

### **Course Objective:**

The course seeks to provide a sense of strategic orientation and build analytical skills and capabilities in the discipline of marketing decision making, especially in context of emerging economies like India

### **Course Learning Outcomes:**

- Provides 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
- Helps in understanding and building analytical skills and capabilities in Strategic marketing management, Marketing strategy and planning, Product and Brand strategies, Pricing strategy, Advertising and sales promotion strategies etc.
- Understand Digital Marketing , Implementation and control of Marketing, Distribution strategy and Market and environmental analysis
- Provide thorough training in Case Study based analysis

### **Content**

#### **Unit 1 Introducing Strategic Marketing**

Understanding Competitive pressures and changes in the market place: future of Marketing, Unleashing the power of marketing. Marketing strategy and planning: business strategy and competitive advantage, marketing audit, marketing costs and financial analysis

#### **Unit II Understanding the foundation of competitive Advantage**

Strategic Triangle: Customer, Competitor, and Corporation. Customer Analysis: Gaining Customer Insight; Corporation- Strategic Analysis of the internal environment; Competitor Analysis: Assessing Marketing Opportunities

#### **Unit III Strategic Direction and Strategy Formulation**



Hierarchy of strategic choices and decisions, Strategic marketing decisions, Analytical models and frameworks, Where to compete and How to compete, Generic strategies and the significance of competitive advantage

### **Unit IV Strategy Development: Creating Competitive Advantage**

Product and Brand Strategy: Creating Market Focused Strategy; Analyzing the product portfolio; Product Innovation and development strategies; Brand Management; Service marketing strategies.

Strategic Pricing: Power of pricing, pricing of products, services and high tech products, pricing as a competitive tools, long term pricing strategy

### **Unit V Strategy Implementation: Gaining Competitive Advantage**

Distribution / Channel Strategy; Promotion Strategy and Marketing communication

### **Unit VI Digital Marketing**

E- Marketing Strategies; Social and ethical strategies; Analytical Tools

### **Readings:**

- Cravens, David W., & Nigel Piercy (2002): Strategic Marketing, Singapore: McGraw-Hill/Irwin
- Davidson, Hugh; Warren J. Keegan, Elyse Arno Brill (2004): Offensive marketing: An Action Guide To Gaining Competitive Advantage, New Delhi: Pearson Publishers
- Douglas West, John Ford, and Eassam Ibrahim, (2010) Strategic Marketing, -Creating Competitive Advantage, Oxford, 2nd ed 2010
- 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
- Mac Hulber, James, Noel Capon, Nigel F. Piercy, (2003) Total Integrated Marketing, Kogan Page
- Wilson M.S., and Colin Gilligan (2005) Strategic Marketing Management, Elsevier, 2005
- Nag, A., (2008): Strategic marketing, India, Macmillan Publishers



- Paley, Norton (2007) Competitive marketing strategies, Viva books, 2007

### Weekly Teaching Plan:

| Week    | Topic  |
|---------|--|
| Week 1  | Competitive pressures and changes in the market place: future of Marketing, Unleashing the power of marketing.   |
| Week 2  | Marketing strategy and planning: business strategy and competitive advantage, marketing audit, marketing costs and financial analysis  |
| Week 3  | Customer Analysis: Gaining Customer Insight;   |
| Week 4  | Corporation- Strategic Analysis of the internal environment; Competitor Analysis: Assessing Marketing Opportunities  |
| Week 5  | Internal Assignment presentation I   |
| Week 6  | Hierarchy of strategic choices and decisions, Strategic marketing decisions , Analytical models and frameworks   |
| Week 7  | Where to Compete and How to compete, Generic strategies and the significance of competitive advantage  |
| Week 8  | Product and Brand Strategy: Creating Market Focused Strategy; Analyzing the product portfolio; Product Innovation and development strategies; Brand Management; Service marketing strategies |
| Week 9  | Strategic Pricing: Power of pricing, pricing of products, services and high tech products, pricing as a competitive tools, long term pricing strategy  |
| Week 10 | Internal Assignment presentation II  |
| Week 11 | Distribution / Channel Strategy;   |
| Week 12 | Promotion Strategy and Marketing communication   |
| Week 13 | E- Marketing Strategies;   |
| Week 14 | Social and ethical strategies; Analytical Tools  |
| Week 15 | Internal Assignment presentation III   |

### Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes  | Teaching and Learning Activity                   | Assessment Tasks                                     |
|----------|---|--|--|
| 1.       | Provides students with an overview of the discipline of marketing, within a | Lectures and case studies, Debate and discussion | Classroom Quiz, Written Assignment and presentations |

|    |   |  |  |
|----|---|--|--|
|    | corporate and functional context, an appreciation of the tools, concepts and models required to undertake an evaluation of the marketplace                      |  |  |
| 2. | Helps in understanding and building analytical skills and capabilities in Strategic marketing management, with focus on customer, competitors, and corporations | Lectures and case studies, Debate and discussion | Classroom Quiz, Written Assignment and presentations |
| 3. | Helps in understanding and building analytical skills and capabilities in Marketing strategy and planning   | Lectures and case studies, Debate and discussion | Classroom Quiz, Written Assignment and presentations |
| 4. | Helps in understanding and building analytical skills and capabilities in Product and Brand strategies, Pricing strategy,.                                      | Lectures and case studies, Debate and discussion | Classroom Quiz, Written Assignment and presentations |
| 5. | Helps in understanding and building analytical skills and capabilities Advertising and sales promotion strategies Understand Distribution strategy              | Lectures and Analysis of Country experiences     | Classroom Quiz, Written Assignment and presentations |
| 6  | Helps in understanding and  | Lectures and                                     | Classroom Quiz, Written                              |



|  |   |                                       |                                 |
|--|---|---------------------------------------|---------------------------------|
|  | building analytical skills and capabilities<br>Digital Marketing ,<br>Implementation and<br>control of Marketing, | Analysis of<br>Country<br>experiences | Assignment and<br>presentations |
|--|---|---------------------------------------|---------------------------------|



## **424802306 : MARKETING RESEARCH**

**Marks: 100**

**Duration: 60 hrs**

### **Course Objective:**

This course introduces students to marketing research: the effective gathering, analysis and use of information about markets, consumers and competition. It addresses the use of marketing research as an aid to making marketing decisions from the perspective of both users of research results as well as marketing researchers.

### **Course Learning Outcomes:**

- Students are introduced to marketing research: the effective gathering, development and use of information about markets and their component consumers and competition.
- Students will learn about application of marketing research design, questionnaire design and sampling techniques.
- Students will learn to carry out primary research and learn to apply quantitative and qualitative tools to analyse findings.
- Students would be made aware of important ethical issues in marketing research

### **Contents:**

#### **Unit I: Marketing research – An introduction :**

Basic and applied research, value and limitations, overview of research process; Marketing information and decision support systems; Applications of marketing research, the client / researcher interface, decision stages and information systems.

#### **Unit II: Research Objectives and Qualitative Research Methods :**

Defining the research agenda and developing an approach; Basic Issues in



Research Design and types of Data; Rationale for qualitative research methods; Tools of qualitative research, Observation and Psychological measures, Focus Group Discussions; Analysis of qualitative data

**Unit III: Measurement and Scaling, Questionnaire Design and Sampling:**

Introduction to alternative scaling techniques (e.g., Comparative and Non-comparative scaling techniques); Designing an appropriate questionnaire – key concepts and issues; Sample selection and sample size decisions; Basic issues in design and implementation of Field surveys;

**Unit IV: Basic Statistical Tools for Research :**

Frequency Distributions and Cross-tabulations; Hypotheses Testing (parametric and non-parametric tests); ANOVA (one-way and n-way); Regression Analysis; Presentation of Research Findings

**Unit V: Essential Statistical Tools for Market Research:**

Discriminant Analysis; Factor Analysis; Cluster Analysis; Multidimensional Scaling and Conjoint Analysis; Presentation of Research Findings

**Unit VI: Cases and Ethics in Marketing Research**

Various Cases including product research, advertising research, marketing and sales analysis research , brand positioning and market segmentation , evaluating new marketing strategies; Emerging applications of marketing research including database marketing and relationship marketing; Ethical issues in marketing research including code of ethics, ethical issues involving treatment of : respondents/subjects, buyers / clients, research.

**Readings:**

- Grover, Rajiv and Marco Vriens (2006). The handbook of marketing research, uses, misuses and futures advances New Delhi, Sage, 2006
- Haque, Paul (2002). Market Research, a guide to planning, methodology and evaluation, New York Kogan Page
- Malhotra, N. and Dash, S. (2011). Marketing Research, Pearson Education, New Delhi (Latest Edition).
- Nargundkar Rajendra (2004) Marketing Research, New Delhi ,Tata McGraw Hill (Latest Edition).
- Smith, Scott M., and Gerald S. Albaum, (2005): Fundamentals of marketing research, New Delhi, Sage (Latest Edition).

### Weekly Teaching Plan:

| Week    | Topic  |
|---------|--|
| Week 1  | Introduction to Key Issues in Marketing Research                 |
| Week 2  | Research Objective, Plan and Design                              |
| Week 3  | Qualitative Research Methods                                     |
| Week 4  | Focus Group Discussions  |
| Week 5  | Measurement and Scaling  |
| Week 6  | Questionnaire Design   |
| Week 7  | Sampling and Conduct of Field Surveys                            |
| Week 8  | Student Presentations; Basic Statistical tools for Data Analysis |
| Week 9  | Hypotheses Testing and ANOVA                                     |
| Week 10 | Regression Analysis and Discriminant Analysis                    |
| Week 11 | Factor Analysis  |
| Week 12 | Cluster Analysis   |
| Week 13 | Conjoint Analysis  |
| Week 14 | Cases in Marketing Research                                      |
| Week 15 | Ethics in Marketing Research; Student Presentations              |

### Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Outcomes  | Learning | Teaching and Learning Activity | Assessment Tasks                       |
|----------|--|----------|--------------------------------|--|
| 1.       | Students will have an overview of Marketing Research   |          | Lectures, case studies         | Group discussion                       |
| 2.       | Students will learn about Research Objective, Design and Qualitative Research Methods                      |          | Lectures, case studies         | Group discussion, Student Presentation |
| 3.       | Students will learn to use various Scaling techniques, Design a Questionnaire and carry out Sample surveys |          | Lectures, case studies         | Group Project, Student Presentation    |
| 4.       | Students will learn to apply several statistical tools for data analysis                                   |          | Lectures, case studies         | Group Project, Student Presentation    |



|    |   |                        |      |                             |         |
|----|---|------------------------|------|-----------------------------|---------|
| 5. | Students will learn to apply certain essential statistical tools for market research (e.g., Factor analysis, Cluster analysis etc.) | Lectures, case studies | case | Group Project, Presentation | Student |
| 6. | Students will learn about various cases in market research and the importance of ethics in such research                            | Lectures, case studies | case | Group Project, Presentation | Student |



## **424802407 : LOGISTICS AND SUPPLY CHAIN MANAGEMENT**

**Marks: 100**

**Duration: 60 hrs**

### **Course Objectives:**

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.

### **Course Outcomes:**

- 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.

### **Contents:**

#### **Unit 1: Introduction to Supply Chain Management**

Basics and concepts of Supply chain management, processes and implications

#### **Unit 2: Economic Aspects of Supply Chain Management**

Economic justification of SCM and risks involved; functions of supply chain management; differences with the conventional marketing approaches

#### **Unit 3: Structure of Supply Chain Management**

Warehousing – types, layouts, order picking, packaging and unitization; Transportation – choices, considerations, inter-modal and documentation.

#### **Unit 4: International Conventions**

International Conventions: legal aspects, international practices, chartering principles and documentation, maritime insurance and frauds.

#### **Unit 5: Role of Technology and Contemporary Developments**

Role of technology in SCM – IT, e-business, ERP etc.; Contemporary developments: 3 PL/4 PL, reverse logistics and other practices.



### **Suggested Readings:**

- 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 – “Purchasing 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.

### Weekly Plan:

|                |   |
|----------------|---|
| <b>Week 1</b>  | Introduction to basic concepts of Supply Chain Management                         |
| <b>Week 2</b>  | Economic Aspects and justifications   |
| <b>Week 3</b>  | Functions and risk involved with SCM  |
| <b>Week 4</b>  | Case Studies  |
| <b>Week 5</b>  | Structure of Supply Chain Management: Warehousing                                 |
| <b>Week 6</b>  | Transportation aspects: Choices, considerations, documentation etc.               |
| <b>Week 7</b>  | Presentations   |
| <b>Week 8</b>  | Presentations   |
| <b>Week 9</b>  | Introduction to the important international conventions                           |
| <b>Week 10</b> | Legal aspects, international practices, principles, maritime insurance and frauds |
| <b>Week 11</b> | Role of Technology in SCM including IT  |
| <b>Week 12</b> | Concepts of e business, ERP etc. associated with SCM                              |
| <b>Week 13</b> | Introduction to the contemporary developments in SCM                              |

|                |  |
|----------------|--|
| <b>Week 14</b> | 3 PL/ 4PL, reverse logistics and other practices |
| <b>Week 15</b> | Mid Term   |

**Learning Outcomes:**

| <b>Unit Number</b> | <b>Course Learning Outcome</b>  | <b>Teaching and Learning Activity</b> | <b>Assessment Tasks</b>  |
|--------------------|---|---------------------------------------|--------------------------|
| <b>Unit 1</b>      | Understanding the basic concepts, functions and aspects of Supply Chain Management                                  | Lecture/ Class Discussions            | Mid Term                 |
| <b>Unit 2</b>      | Understanding the economic concepts and risk involved in SCM  | Lecture/ Case Studies                 | Case study Presentations |
| <b>Unit 3</b>      | Warehousing and Transportations aspects of Supply Chain Management  | Lecture/ Class Discussions            | Mid Term                 |
| <b>Unit 4</b>      | Developing knowledge of the international conventions, legal aspects, international aspects, insurance, frauds etc. | Lecture/ Case Studies                 | Case study Presentations |
| <b>Unit 5</b>      | Understanding the contemporary developments in SCM and other related practices                                      | Lecture/ Case Studies                 | Case study Presentations |

**424802408 : INTERNATIONAL MARKETING**

**Marks: 100**

**Duration: 60 hrs**

## **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.

## **Course Learning Outcomes**

- Equips students with the tools and terminology to explore and understand marketing practices in a global environment and provides a practical overview of the key elements of international marketing and issues businesses face when entering and operating in foreign markets
- Provides students with the latest understanding of global issues, disciplines, competitions and the necessary skills in making strategic decisions based on a global perspective.
- Helps understand International Marketing, Internationalization process, Developing global vision through market research, Entry modes and strategy, International distribution systems, International pricing.

## **Contents**

### **Unit I: Introduction**

Concept and relevance, Internationalization process

### **Unit II: 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

### **Unit III: 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 collection

### **Unit IV: International marketing strategy/global strategy**



Competitive advantage and value chain, Entry modes and strategy, Exports-Exim policy in India, financing sources, marketing risks, institutional framework, Strategic alliances, and international marketing negotiations

### **Unit V: Developing and selling products for global markets**

Creating products for global consumers, International pricing, distribution systems, advertising and promotion, e-business

#### **Readings:**

- Douglas Lamont, (1997) Winning Worldwide, John Wiley and Sons
- Joshi, Rakesh M.,(latest edition) International Marketing, New Delhi: Oxford University Press
- Masaaki Kotabe and Kristiaan Helsen, (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
- Keegan, Warren J., ( 2004), Global Marketing, India: Pearson Education

#### **Weekly Teaching Plan:**

| <b>Week</b> | <b>Topic</b>  |
|-------------|---|
| Week 1      | Introduction: Concept and relevance, Internationalization process   |
| Week 2      | 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 |
| Week 3      | Environment analysis: political and legal environment- need critical evaluation- WTO and its various provisions   |
| Week 4      | Developing global vision through market research: Export market selection- definition and strategy, market definition and segmentations and strategy  |

|         |  |
|---------|--|
| Week 5  | Developing global vision through market research: market expansion, selection process, procedures, strategy, foreign market portfolios, sources of information   |
| Week 6  | Developing global vision through market research: assessing market potential, export marketing research, using internet e-mail for data collection   |
| Week 7  | Test and Discussion  |
| Week 8  | International marketing strategy/global strategy: Competitive advantage and value chain, Entry modes and strategy  |
| Week 9  | International marketing strategy/global strategy: Exports-Exim policy in India, financing sources, marketing risks, institutional framework, Strategic alliances, and international marketing negotiations |
| Week 10 | International marketing strategy/global strategy: Strategic alliances, and international marketing negotiations  |
| Week 11 | Developing and selling products for global markets: Creating products for global consumers, International pricing  |
| Week 12 | Developing and selling products for global markets: International distribution systems, advertising and promotion, e-business  |
| Week 13 | Test and Discussion  |
| Week 14 | Student Presentations  |
| Week 15 | Student Presentations  |

### Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes                               | Teaching and Learning Activity | Assessment Tasks                             |
|----------|--|--------------------------------|--|
| 1.       | Understanding concept and Internationalization process | Lectures, case studies         | Test, Group discussion, Student Presentation |
| 2.       | Understanding the environment for a global market      | Lectures, case studies         | Test, Group discussion, Student Presentation |

|    |   |                        |  |
|----|---|------------------------|--|
| 3. | Developing global vision through market research                    | Lectures, case studies | Test, Student Presentation, Group discussion |
| 4. | Understanding the strategy of international marketing               | Lectures, case studies | Test, Student Presentation, Group discussion |
| 5. | Understanding the different approaches to advertising and promotion | Lectures, case studies | Test, Student Presentation, Group discussion |
| 6. | Understanding how to develop and sell products for global markets   | Lectures, case studies | Test, Student Presentation, Group discussion |



## **ELECTIVE COURSE: CUSTOMER RELATIONSHIP MANAGEMENT**

**Marks: 100**

**Duration: 60 hrs**

**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.

### **Course Learning Outcomes:**

- Provides an overview of CRM, changing role of CRM and the Influence of Globalization on CRM
- Helps to understand Customer equity and its components, Economics of CRM, Strategic CRM, Customer Loyalty and Loyalty programs, CRM in fast moving consumer goods etc.
- Analyze Customer Profitability , Satisfaction Profit Chain, Allocating Resources to customers etc.

### **Contents:**

#### **Unit I: Introduction to CRM**

Evolution of the concept, changing role of CRM, Influence of Globalization on CRM

#### **Unit II: CRM process**

Concepts and Tools

#### **Unit III: Customer equity and its components:**

Brand equity, value equity and relationship equity

#### **Unit IV: Economics of CRM:**

Customer life time value, Customer life cycle analysis

#### **Unit V: Strategic CRM**

CRM implementation in B-to-C, CRM implementation in B-to-B, Customer Loyalty and Loyalty programs, Lasting relationship through service offerings, CRM in fast moving consumer goods

#### **Unit VI: CRM and the customer**

Customer Profitability Analysis, Satisfaction Profit Chain, Allocating Resources to customers

#### **Unit VII: Future Outlook and Success of CRM**



## Critical success factors and Obstacles in CRM Success, e-CRM

### Readings:

- Blattberg, Roberts, Gary Getz and Jacqueline. S. Thomas (2001) Customer Equity: Building and Managing Relationship as Valuable Assets, Boston, Harvard Business School Press.
- Buttle Francis (2009) 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.
- Peelen Ed (2005) Customer Relations Management, Prentice hall
- Swift, Ronald, S. (2000) Accelerating Customer Relationship using CRM and Relationship Techniques. Upper Saddle River, N.J. Prentice hall

### Weekly Teaching Plan:

| Week   | Topic  |
|--------|--|
| Week 1 | Introduction to CRM: Evolution of the concept, changing role of CRM, Influence of Globalization on CRM |
| Week 2 | CRM process: Concepts  |
| Week 3 | CRM process: Tools   |
| Week 4 | Customer equity and its components: Brand equity, value equity and relationship equity                 |
| Week 5 | Student Presentations  |
| Week 6 | Economics of CRM: Customer life time value, Customer life cycle analysis                               |
| Week 7 | Mid- term Test   |
| Week 8 | Strategic CRM: CRM implementation in B-to-C, CRM implementation in B-to-B                              |
| Week 9 | Strategic CRM: Customer Loyalty and Loyalty programs, Lasting relationship through service offerings   |

|         |  |
|---------|--|
| Week 10 | Strategic CRM: CRM in fast moving consumer goods   |
| Week 11 | CRM and the customer: Customer Profitability Analysis, Satisfaction Profit Chain         |
| Week 12 | CRM and the customer: Allocating Resources to customers                                  |
| Week 13 | Future Outlook and Success of CRM: Critical success factors and Obstacles in CRM Success |
| Week 14 | Future Outlook and Success of CRM: e-CRM   |
| Week 15 | Student Presentations  |

### Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes                            | Teaching and Learning Activity | Assessment Tasks |
|----------|---|--------------------------------|------------------|
| 1.       | Understanding the concepts and tools of CRM         | Lectures, Case Studies         | Test             |
| 2.       | Understanding Customer equity and its components    | Lectures, case studies         | Test             |
| 3.       | Understanding the economics of CRM                  | Lectures, case studies         | Test             |
| 4.       | Understanding how to use strategic CRM              | Lectures, case studies         | Class Discussion |
| 5.       | Understanding the importance of the consumer in CRM | Lectures, case studies         | Class Discussion |
| 6.       | Understanding the future outlook of CRM             | Lectures, case studies         | Research Project |



Electives  
(Group 3)  
Finance



## 424802310 : FINANCIAL DERIVATIVES

**Marks: 100**

**Duration: 60 hrs**

### **Course Objectives:**

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.

### **Course Outcomes:**

- Understanding the basics of futures forwards and options market
- Understanding hedging and Mechanics of future and forward pricing using arbitrage strategies
- Properties of Options, Pricing strategies of options using the binomial trees and Black Sholes Merton pricing model, risk neutral valuation
- Designing and understanding various types of swap contracts
- Designing trading strategies using options and forwards contracts

### **Contents:**

#### **Unit 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.

#### **Unit 2: Mechanics of Futures Market and Determination of Prices**

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. 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.

#### **Unit 3 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.

### **Unit 4 Mechanics of Options and their properties**

Specifications of Options Contracts; Moneyness of Options; Types of options; Trading & Settlement; Adjustments for Corporate actions ; Factors affecting Option prices; Upper & Lower Bounds of Option prices; Early exercise of American options; Put-Call parity & its uses.

### **Unit 5 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.

### **Unit 6: Trading Strategies using Options and Swaps**

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. Types of Swaps: Interest rate & Currency Swaps - Structure, Pricing and Valuation.

### **Suggested 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. & Sankarshan Basu,(2012) Options, Futures, and Other Derivatives, Pearson Education.
- Kolb, Robert W. and James A. Overdahl, (2009), Futures, Options & Swaps, Wiley India.

### **Weekly Plan:**

|        |  |
|--------|--|
| Week 1 | Introduction to Financial Markets and Types of Financial Assets                          |
| Week 2 | Forward and Future Contracts : Meaning, Specifications, Payoffs, Profits and Differences |
| Week 3 | Short Selling & Determination of prices for forward and future contracts                 |

|         |   |
|---------|---|
| Week 4  | Arbitrage Theory and its applications in pricing of Assets  |
| Week 5  | Introduction to hedging using Future contracts and types of hedging   |
| Week 6  | Choice of Contracts for hedging, Hedge Ratios and Optimal Number of Contracts   |
| Week 7  | Mid Term 1: Assessment 1  |
| Week 8  | Introduction to Options Markets: Call and Put Options   |
| Week 9  | Specifications of Options, in money and out of money, Trading and Settlement  |
| Week 10 | Pricing of Options: Upper and Lower Bounds, Put Call Parity etc.  |
| Week 11 | Binomial Options Pricing Model  |
| Week 12 | Trading Strategies using options: Different Types of Spreads  |
| Week 13 | Mid Term 1: Assessment 2 and Case Study Presentations   |
| Week 14 | Swap Contracts and Greek letters  |
| Week 15 | Students Activity: Case study activity to design profitable contracts using options, futures, spreads and swap arrangements |

### Learning Outcomes:

| Unit Number   | Course Learning Outcome   | Teaching and Learning Activity           | Assessment Tasks                   |
|---------------|---|--|------------------------------------|
| <b>Unit 1</b> | Develop an understanding of financial derivatives like futures, forwards and options and their applications | Lecture/ Class Discussions/ Case Studies | Case Study Presentations/ Mid Term |
| <b>Unit 2</b> | Understanding detailed mechanics of forward markets and price determination concepts                        | Lecture/ Case Studies                    | Mid Term                           |
| <b>Unit 3</b> | Understanding the types and concepts of hedging using futures   | Lectures/ Presentations                  | Presentations/ Mid Term            |
| <b>Unit 4</b> | Understanding valuations and properties of options contracts  | Lectures/ Case Studies                   | Case Study Presentations/ Mid Term |
| <b>Unit 5</b> | Understanding valuation of options  | Lectures/Assignments                     | Mid Term                           |



|               |  |                                       |  |
|---------------|--|---------------------------------------|--|
| <b>Unit 6</b> | Understanding various trading strategies and their practical applicability | Lectures/Assignments/<br>Case Studies | Case Study<br>Presentations/<br>Mid Term |
|---------------|--|---------------------------------------|--|



## **424802311 : INVESTMENT AND PORTFOLIO THEORY AND MANAGEMENT**

**Marks: 100**

**Duration: 60 hrs**

### **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.

### **Course Learning Outcomes:**

- To understand the basic concepts of portfolio and investment management such types of investment, assets and associated risk and returns
- Enable students to compute prices, risks and return on various financial assets
- Valuation of firms and companies based upon procedures such as cash flow analysis
- Understanding theories of arbitrage and Capital asset pricing model
- Understanding the important concepts for the portfolio construction
- Understanding detailed models of portfolio construction using Markowitz approach etc.

### **Contents:**

#### **Unit I An overview of investment**

Investment process, Investment options, Types of investors, Concept of Risk & Return, Concept of Asset Market, Instruments & Security Trading -Short selling, leverage and arbitrage, How Securities are traded, Markets and Trading: Trading orders, Asset Classes, Securities Market

#### **Unit II: 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, Fundamental Analysis -Bottom up investing: Value approach and growth approach, Top-down investing (The E-I-C Analysis framework )



### **Unit III: 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),Market Efficiency -The random walk model, weak, semi strong and strong forms of market efficiency, event studies & calendar effects

### **Unit IV: Technical Analysis**

Conceptual Foundation, Theoretical Basis of technical analysis, Charting, Technical Indicators Patterns, Capital Market Theory -Arbitrage Pricing Theory, Capital Asset Pricing Model

### **Unit V: Portfolio Construction**

Need for Portfolio Construction, Asset Classes and their impact on portfolio, Portfolio Construction -Asset Classes and their impact on portfolio,

### **Unit VI Theory of Portfolio Construction**

Portfolio Construction Process, Determine the efficient frontier, Markowitz Portfolio Selection Model 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.

### Weekly Teaching Plan:

| Week    | Topic  |
|---------|--|
| Week 1  | An overview of investment- Investment process, Investment options, Types of investors, Concept of Risk & Return, Concept of Asset Market.  |
| Week 2  | Instruments & Security Trading -Short selling, leverage and arbitrage, How Securities are traded, Markets and Trading: Trading orders, Asset Classes, Securities Market.   |
| Week 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.  |
| Week 4  | Immunization and other bond management strategies, rebalancing of portfolios, Fundamental Analysis -Bottom up investing: Value approach and growth approach, Top-down investing (The E-I-C Analysis framework )              |
| Week 5  | Company Analysis- Cash flow based valuation - Discounted cash flow analysis Estimation of cost of capital, Relative valuation metrics and investment decision.   |
| Week 6  | Valuation multiples ( P/E, Price to Book Value , EV/EBITDA, Price to sales),Market Efficiency -The random walk model, weak, semi strong and strong forms of market efficiency, event studies & calendar effects.             |
| Week 7  | Students Presentation.   |
| Week 8  |  |
| Week 9  | Technical Analysis- Conceptual Foundation, Theoretical Basis of technical analysis, Charting, Technical Indicators Patterns.   |
| Week 10 | Capital Market Theory -Arbitrage Pricing Theory, Capital Asset Pricing Model.  |
| Week 11 | Portfolio Construction- Need for Portfolio Construction, Asset Classes and their impact on portfolio.  |
| Week 12 | Theory of Portfolio Construction -Portfolio Construction Process, Determine the efficient frontier, Markowitz Portfolio Selection Model Portfolio performance measurement & revision - Sharpe portfolio performance measure. |
| Week 13 | Treynor portfolio performance measure , Portfolio revision, Fama's model, information and $m^2$ ratios, market timing and shifting strategies of a manager, style analysis   |
| Week 14 | Students Presentation.   |
| Week 15 |  |

### Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes   | Teaching and Learning Activity | Assessment Tasks  |
|----------|--|--------------------------------|---|
| 1.       | To understand the basic concepts of portfolio and investment management such types of investment, assets and associated risk and returns | Lectures, case studies.        | Problem solving, Group discussion, Student Presentation |
| 2.       | Enable students to compute prices, risks and return on various financial assets  | Lectures, case studies         | Problem solving, Student Presentation, Group Project    |
| 3.       | Valuation of firms and companies based upon procedures such as cash flow analysis  | Lectures, case studies         | Problem solving, Student Presentation, Group Project    |
| 4.       | Understanding theories of arbitrage and Capital asset pricing model  | Lectures, case studies         | Problem solving, Student Presentation, Group Project    |
| 5.       | Understanding the important concepts for the portfolio construction  | Lectures, case studies         | Problem solving, Student Presentation, Group Project    |
| 6.       | Understanding detailed models of portfolio construction using Markowitz approach etc.  | Lectures, case studies         | Problem solving, Student Presentation, Group Project    |



## **424802414 : CORPORATE RESTRUCTURING, MERGERS & ACQUISITIONS**

**Marks: 100**

**Duration: 60 hrs**

### **Course Objectives:**

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

### **Course Outcomes:**

- Exposes the students to a broad range of financial restructuring techniques by which corporate re-aligning and restructure their businesses in order to increase firm value
- Students learn the Theories of Mergers, Regulatory Environment & Compliance in India, Valuation of Target Firms, Financing of Acquisitions and Accounting for Mergers & Acquisitions
- Comprehend Buyback of Shares, Leveraged Buyouts, Delisting of Equity Shares, Employee Stock Option Scheme and Brand Valuation

### **Contents:**

#### **Unit 1: Basic concepts and Theories of mergers**

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.

#### **Unit 2: Regulatory Environment & Compliance in India and Valuation of Target Firms**

Book Value Method, Discounted Cash Flow Methods – DCF, FCFE, FCFF, 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. 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

#### **Unit 3: Financing of Acquisitions and Accounting for Mergers & Acquisitions**

Pooling of interest, purchase methods and their features. Pros & Cons; Tax implications in M & A. Concept; Methods of buyback – Tender offer, Open Market

Purchase, Reverse Book-building method; Pros and Cons; SEBI Regulations; Empirical evidence on buybacks

#### **Unit 4: Leveraged Buyouts and Delisting of Equity Shares**

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. Rationale of de listing, SEBI Regulations on delisting, Procedure for delisting and compulsory and Voluntary delisting.

#### **Unit5: Employee Stock Option Scheme and Brand Valuation**

Brand Valuation: Meaning, Rationale, Different Methods of Brand Valuation – Relief from Royalty; Excess Value Approach, Inter brand Approach. Stock Option Scheme: Meaning, Types of ESOPs, and Regulatory Environment in India.

#### **Suggested Readings:**

- Arzac Enrique R., (2008), Valuation for Mergers, Buyouts and Restructuring, Wiley. Damodaran Aswath,(2010),
- 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.HaroldMulherin, &PrashantSalwan, (2011)
- Takeovers, Restructuring and Corporate Governance, Pearson.

#### **Weekly Plan:**

|               |   |
|---------------|---|
| <b>Week 1</b> | Introduction to basic concepts of restructuring, mergers and acquisitions       |
| <b>Week 2</b> | All important theories of mergers, their applications and Regulatory frameworks |
| <b>Week 3</b> | Different valuation methods – DFC, FCFE, FCFE etc.                              |
| <b>Week 4</b> | Methods of payments and financing of acquisitions                               |

|                |  |
|----------------|--|
| <b>Week 5</b>  | Case Study Presentations   |
| <b>Week 6</b>  | Pooling interest and Purchase methods for accounting M&A                               |
| <b>Week 7</b>  | Leverage buyouts, their rationale, terminal values, cashing out horizons etc           |
| <b>Week 8</b>  | Computing Returns to investors, Earning and cash flow forecasting                      |
| <b>Week 9</b>  | Mid Term Assessment  |
| <b>Week 10</b> | Debt capacity, Target IRR and backward induction                                       |
| <b>Week 11</b> | Delisting of equity shares, rationale and rules and regulations                        |
| <b>Week 12</b> | Meaning and types of ESOP's and their regulatory environment                           |
| <b>Week 13</b> | Different methods of Brand Valuation – relief from royalty, excess value approach etc. |
| <b>Week 14</b> | Case Study Presentations   |
| <b>Week 15</b> | Case Study Presentations   |

### Learning Outcomes:

| <b>Unit Number</b> | <b>Course Learning Outcome</b>  | <b>Teaching and Learning Activity</b> | <b>Assessment Tasks</b> |
|--------------------|---|---------------------------------------|-------------------------|
| <b>Unit 1</b>      | To understand the basic concepts and theories of and types of mergers and acquisitions                        | Lecture/ Class Discussion             | Presentations/ Mid Term |
| <b>Unit 2</b>      | Understanding the process of valuation of firms and the regulatory environment and compliance issues in India | Lecture                               | Mid Term                |
| <b>Unit 3</b>      | Understanding the Financing and the accounting aspects of mergers and acquisitions                            | Lecture/ Class Discussion             | Presentations/ Mid Term |
| <b>Unit 4</b>      | Familiarizing students with concepts of buy outs and methods of buy backs and                                 | Lecture                               | Mid Term                |



|               |  |                           |                         |
|---------------|--|---------------------------|-------------------------|
|               | Delisting of companies and compliance issues                     |                           |                         |
| <b>Unit 5</b> | Understanding Brand valuation and employee stock options schemes | Lecture/ Class Discussion | Presentations/ Mid Term |



## 424802413 : CREDIT AND RISK MANAGEMENT

**Marks: 100**

**Duration: 60 hrs**

### **Course Objectives:**

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 appraises with the emerging technologies in current business environment.

### **Course Outcomes:**

- Helps develop an integrated approach to measuring and managing all risks directed towards value maximization
- Learning Risks of financial intermediation, Interest rate risk, Market Risk and Credit Risk
- Comprehend Off balance sheet activities, Operating cost and technology risk , Foreign exchange risk and sovereign risk and Bank capital requirement under Basel I, Basel II and Basel III norms

### **Contents:**

#### **Unit 1: Risks of financial intermediation and interest rate risk**

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.

#### **Unit 2: Market and Credit Risk**

Measurement; fixed income securities; foreign exchange; equities and portfolio aggregation. 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

#### **Unit 3: Off balance sheet activities**

Loan commitments; commercial letter of credit; derivatives contracts; loans sold

#### **Unit4: Operating costs and types of risks**

Technological innovation; profitability; testing for economies of scale; economies of scope; risks in payment system; Foreign exchange risk; sovereign risk.

#### **Unit 5: Bank Capital requirements and liquidity risks**



Bank runs and deposit insurance. Bank capital requirements under Basel I; Basel II and Basel III norms

### Suggested 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., Sankarshan Basu, (2010), Options, Futures and Other Derivatives, Pearson Education, New Delhi
- Stulz, R., (2007) Risk Management and Derivatives, Cengage Learning

### Weekly Plan:

|                |   |
|----------------|---|
| <b>Week 1</b>  | Introduction to different types of risk in financial intermediation                                 |
| <b>Week 2</b>  | The maturity model and duration model   |
| <b>Week 3</b>  | Duration Model and introduction to market risks   |
| <b>Week 4</b>  | Measurements of Market risks, foreign exchange, fixed income securities etc.                        |
| <b>Week 5</b>  | Credit Risk and its components: Credit Process and Selection, Application of credit risk management |
| <b>Week 6</b>  | Estimating credit default probabilities (Sessions in Excel)   |
| <b>Week 7</b>  | Credit Risk Management and credit Scoring Models  |
| <b>Week 8</b>  | Mid Term Assessment   |
| <b>Week 9</b>  | Off Balance Sheet Activities : Introduction and processes   |
| <b>Week 10</b> | Derivatives contracts, types of loans, commercial letter of credit                                  |
| <b>Week 11</b> | Technological Innovation and Profitability measures   |
| <b>Week 12</b> | Economies of Scale and Scope; Foreign Exchange Risk and Sovereign risk                              |
| <b>Week 13</b> | Students Presentations  |

|                |                                 |
|----------------|---------------------------------|
| <b>Week 14</b> | Students Presentations          |
| <b>Week 15</b> | Basel Norms and Liquidity risks |

### Learning Outcomes:

| <b>Unit Number</b> | <b>Course Learning Outcome</b>   | <b>Teaching and Learning Activity</b> | <b>Assessment Tasks</b>   |
|--------------------|--|---------------------------------------|---------------------------|
| <b>Unit 1</b>      | Understanding the types of risks and their implications  | Lecture                               | Mid Term                  |
| <b>Unit 2</b>      | Developing an understanding of different credit models, credit selection, credit process etc.  | Lecture/<br>Presentations             | Presentations             |
| <b>Unit 3</b>      | Understanding different types of loan activities, loan commitments etc.                        | Lecture/<br>Presentations             | MidTerm/<br>Presentations |
| <b>Unit 4</b>      | Learning about economies of scale and scope and concepts of technology risks and profitability | Lecture                               | Mid Term                  |
| <b>Unit 5</b>      | Developing knowledge of capital requirements under Basel norms and liquidity risk              | Lecture/ Class<br>Discussions         | Presentations             |



Electives  
(Group 4)  
Economics



## **ELECTIVE COURSE: URBAN TRANSPORT ECONOMICS**

**Marks: 100**

**Duration: 60 hrs**

### **Course objective:**

The objective of this course is to make the students aware of the structure and growth of cities in an economy. This course specially focuses on the need and importance of urban transportation.

### **Course Learning Outcomes:**

- Students will be able to analyse the evolution of urban cities and their importance.
- Student will appreciate the relevance and importance of transportation planning in the urban development.

### **Contents:**

#### **Unit I: 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.

#### **Unit II: The Internal Structure of Cities**

The mono-centric 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.

#### **Unit III: Urban Poverty**

Role of space, Policy responses.

#### **Unit IV: Overview of local government**

#### **Unit V : Growth of cities in India**

#### **Unit VI: 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.

#### **Unit VII: Road freight transport**

## Unit VIII: Road passenger transport

Introduction to passenger transport, macro and micro passenger transport

### Suggested 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, socioeconomic 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.

### Teaching Plan:

| Weeks   | Topics Covered  |
|---------|---|
| Week 1  | Introduction: Development of cities, Alfred Weber's theory of industrial location.  |
| Week 2  | Theory of agglomerations, functions and economic interest of transport.   |
| Week 3  | Transport and economic development, transport and urban development.  |
| Week 4  | The Internal Structure of Cities: The mono centric model of the city.   |
| Week 5  | Urban hierarchies and central place theory, the contemporary city and suburbanization sprawl.   |
| Week 6  | Economics of housing markets, land use patterns and controls.   |
| Week 7  | Urban Poverty: The role of space, policy responses  |
| Week 8  | Overview of local government.   |
| Week 9  | Growth of cities in India.  |
| Week 10 | Economic analysis transport: Economic theory, transport as an economic activity, cost of transport.   |
| Week 11 | Pricing of transport services, law of diminishing returns and economics of scale, transport policy and development in a changing environment. |
| Week 12 | Assessment of present and proposed transport policy and legislation, environment cost of transport, transport regulation                      |
| Week 13 | Road freight transport.   |
| Week 14 | Road passenger transport: Introduction to passenger transport, macro and micro passenger transport  |
| Week 15 | Revision of the course  |

## Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes  | Teaching and Learning Activity  | Assessment Tasks   |
|----------|---|---|--|
|          | Students will be able to  |   |  |
| I        | <ul style="list-style-type: none"> <li>Tell how the urban cities have emerged.</li> <li>Explain the importance of location and transportation in urban development</li> </ul>   | <ul style="list-style-type: none"> <li>Lecture</li> <li>Case Study</li> </ul> | <ul style="list-style-type: none"> <li>Class Test</li> <li>Assignment</li> <li>Student presentation</li> </ul> |
| II       | <ul style="list-style-type: none"> <li>Analyse the internal structure of the urban cities.</li> <li>Explain the various economic theories behind the different structures of urban cities.</li> </ul>   | <ul style="list-style-type: none"> <li>Lecture</li> <li>Case Study</li> </ul> |  |
| III      | <ul style="list-style-type: none"> <li>Relate the role of urban poverty with the development of the cities.</li> </ul>  | <ul style="list-style-type: none"> <li>Lecture</li> </ul>                     |  |
| IV       | <ul style="list-style-type: none"> <li>Tell about the role of the local government in the urban development.</li> </ul>   | <ul style="list-style-type: none"> <li>Lecture</li> </ul>                     |  |
| V        | <ul style="list-style-type: none"> <li>Explain the growth history of the Indian cities.</li> <li>Analyse the future of these Indian cities.</li> </ul>  | <ul style="list-style-type: none"> <li>Lecture</li> <li>Case Study</li> </ul> | <ul style="list-style-type: none"> <li>Class Test</li> <li>Assignment</li> <li>Student presentation</li> </ul> |
| VI       | <ul style="list-style-type: none"> <li>Tell how the cost and price is decided for the transport services.</li> <li>Analyse the laws and policies prepared for the transportation sector.</li> <li>Explain about the social cost and regulations attached to the transportation sector.</li> </ul> | <ul style="list-style-type: none"> <li>Lecture</li> <li>Case Study</li> </ul> |  |
| VII      | <ul style="list-style-type: none"> <li>Tell how the transportation sectors work in the freight category.</li> </ul>   | <ul style="list-style-type: none"> <li>Lecture</li> </ul>                     |  |



|      |  |   |  |
|------|--|---|--|
| VIII | <ul style="list-style-type: none"><li>• Introduce how the passenger transportation sector works.</li><li>• Tell what the micro and macro passenger transports are.</li></ul> | <ul style="list-style-type: none"><li>• Lecture</li></ul> |  |
|------|--|---|--|





## **ELECTIVE COURSE: ENERGY ECONOMICS**

Marks: 100

Duration: 60 hours

### **Course Objectives:**

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.

### **Course Outcomes:**

- 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
- Learn Energy demand, short run and long run price, Energy supply and the economics of non renewable resources etc
- Helps to understand the World oil markets and energy security, Energy efficiency policies and programme, Renewable energy policies and programme, Trading in energy markets and analyze major energy sources such as coal and Nuclear power

### **Contents:**

#### **Unit 1: Introduction to Energy Demand**

Short run and long run price and income elasticity; Energy supply and the economics of depleting resources

#### **Unit 2: Energy Markets, Regulations and policies**

World oil markets and energy security; Natural gas price and regulation, deregulation and markets; Current Electricity Policies and programs; Risk management, futures markets and derivatives

#### **Unit 3: Climate change and Role of Environmental Externalities**

Energy and climate change; internalizing environmental externalities with a focus on Co<sub>2</sub> emissions cap and trade mechanisms

#### **Unit 4: Efficiency outcomes in Energy Economics**

Analysis of energy sources: Coal, nuclear power etc.; energy efficiency policies and program

#### **Unit 5: Overview of energy policies and programs**

Renewable energy policies and programs; trading in energy markets

### Suggested 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, 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.
- Intergovernmental Panel on climate change (IPCC. ,Climate change (2007): The physical science basis, summary for policymakers .
- KrautkraemerJ., 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.

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- 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.

**Weekly Plan:**

|               |   |
|---------------|---|
| <b>Week 1</b> | Introduction to energy demand: Basic concepts, long run and short run elasticity etc. |
| <b>Week 2</b> | Energy supply and economics of depleting resources                                    |
| <b>Week 3</b> | Discussion on world oil markets and energy security issues                            |
| <b>Week 4</b> | Regulation and De regulation in energy economics                                      |
| <b>Week 5</b> | Students Presentations  |

|                |  |
|----------------|--|
| <b>Week 6</b>  | Natural gas prices and discussion on current electricity policies and programs |
| <b>Week 7</b>  | Risk management and scope of future markets and other derivatives              |
| <b>Week 8</b>  | Energy and climate change  |
| <b>Week 9</b>  | Mid Term Assessment  |
| <b>Week 10</b> | Internalization of externalities   |
| <b>Week 11</b> | Analysis of resources : coal and nuclear power                                 |
| <b>Week 12</b> | Energy efficiency policies and program me                                      |
| <b>Week 13</b> | Renewable energy policies and program  |
| <b>Week 14</b> | Trading in energy markets  |
| <b>Week 15</b> | Students Presentations   |

### Learning Outcomes:

| <b>Unit Number</b> | <b>Course Learning Outcome</b>   | <b>Teaching and Learning Activity</b> | <b>Assessment Tasks</b> |
|--------------------|--|---------------------------------------|-------------------------|
| <b>Unit 1</b>      | Understanding basic concepts of energy demand, elasticity etc.   | Lecture/ Class Discussions            | Mid Term                |
| <b>Unit 2</b>      | Developing an understanding of market regulations and de regulations domestically and across the world     | Lecture/ Presentations                | Presentations           |
| <b>Unit 3</b>      | Understanding the role of climate change and impact of environmental externalities                         | Lecture                               | Mid Term                |
| <b>Unit 4</b>      | Understanding energy efficiency policies and analysis of coal and nuclear power in particular              | Lecture/ Class Discussions            | Presentations           |
| <b>Unit 5</b>      | Overview of trading activities in energy economics and programs/ policies associated with renewable energy | Lecture/ Class Discussions            | Presentations           |



## **ELECTIVE COURSE: INFRASTRUCTURE ECONOMICS**



**Marks: 100**  
**60hrs**

**Duration:**

**Course Objective:**

This course seeks to provide a theoretical background about the need for regulation in the infrastructure sector. It introduces students to different infrastructure related policies and their role in the growth of the sector.

**Course Learning Outcomes:**

- Students are exposed to different infrastructure related policies and their role in impacting the overall growth of the country
- They learn about a range of relevant concepts and issues including natural monopoly, debate about the fixation of prices of social services, development of social services in the successive Indian plans, regulation etc.
- Students will understand factors shaping the development of the Air transport industry, Water utilities, International railway trends, railway pricing, Telecom reforms etc. in India

**Contents:**

**Unit I: 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.

**Unit II: Rail transport:**

Analysis of the market, legal requirements and policy, railway characteristics and ownership, containerization, regional rail cooperation, international railway trends, railway pricing, pipelines.

### **Unit III: 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.

### **Unit IV : Water supply:**

Water utilities, urban and rural water supply

### **Unit V: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? In A.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

### Weekly Teaching Plan:

| Week    | Topic  |
|---------|--|
| Week 1  | Theory of natural monopoly, financing of public services, private vs. public sector financing  |
| Week 2  | Debate about the fixation of prices of social services, development of social services in the successive Indian plans,               |
| Week 3  | Regulation, competition and privatization, the role and effectiveness of the regulator in controlling monopoly behaviour             |
| Week 4  | Rail Transport : Introduction, analysis of the market, legal requirements and policy, railway characteristics and ownership          |
| Week 5  | Rail Transport : containerization, regional rail cooperation, international railway trends, railway pricing, pipelines               |
| Week 6  | Air Transport : Introduction, development of the Indian air transport industry, overview of current air transport policies           |
| Week 7  | Group Project and Student Presentations  |
| Week 8  | Air Transport : the roles and responsibilities of national and international control bodies, cost and pricing air transport services |
| Week 9  | Air Transport : airline management and control; Airport planning and management  |
| Week 10 | Water supply: Water utilities, issues in urban water supply  |
| Week 11 | Water supply: issues in rural water supply   |
| Week 12 | Telecommunication: Telecom reforms in India with a critique of national telecom policy 1994, 1999 etc.                               |
| Week 13 | Telecommunication: Relationship between TRAI, Department of telecom, and public and private operators                                |
| Week 14 | Telecommunication: Role of telecom infrastructure in meeting needs of the economy and the IT sector.                                 |



**Facilitating the achievement of Course Learning Outcomes**

| Unit No. | Course Learning Outcomes  | Teaching and Learning Activity | Assessment Tasks   |
|----------|---|--------------------------------|--|
| 1.       | Students will learn about basic concepts related to economics of infrastructure provision, pricing and regulation               | Lectures, case studies         | Group discussion, Student Presentation and Group Project |
| 2.       | Students will learn about key issues and problems related to rail transport in India  | Lectures, case studies         | Group Project, Student Presentation                      |
| 3.       | Students will learn about key issues and problems related to air transport, airport planning and management in India            | Lectures, case studies         | Group Project, Student Presentation                      |
| 4.       | Students will learn about key issues and problems related to management of water utilities in urban and rural contexts in India | Lectures, case studies         | Group Project, Student Presentation                      |
| 5.       | Students will learn about key issues and problems related to the telecom sector in India  | Lectures, case studies         | Group Project, Student Presentation                      |



## ELECTIVE COURSE: AGRICULTURE ECONOMICS

Marks:100

Duration: 60 Hrs.

**Course Objectives:** 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 critically analyze and assess issues, policies and programmes with special emphasis on Indian agriculture.

### Course Learning Outcomes:

- Knowledge about nature and scope of Agriculture Economics.
- Agriculture and its role in economic development of a country.
- Dilemma of Development; the importance of agriculture declines in course of time.
- Problems and issues related with Indian agriculture.
- Regional imbalances in Indian Agriculture and challenges of interlinking of India's agriculture with rest of the world.

### Syllabus:

**Unit I: Nature and Scope:** Nature and Scope of economics of agriculture, inter - sectoral linkages of agriculture (backward and forward linkages and feedback effect).

**Unit II: 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

**Unit III: Agricultural Production Function:** Agricultural production function; uniqueness and types of agricultural production function; Cobb-Douglas and CES production function.

**Unit IV: 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.

**Unit V: 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.

### **Suggested 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
- GhatakSubrata 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, NBT, New Delhi.

### **Teaching Plan:**

|         |  |
|---------|--|
| Week 1: | Nature and Scope of economics of agriculture, inter -sectoral linkages of agriculture (backward and forward linkages and feedback effect). |
| Week 2: | The contribution of agriculture to economic development. Historic perspective (experience of developed and developing countries).          |
| Week 3: | Declining role of agriculture and dilemmas of development.   |
| Week 4: | Agricultural production function; uniqueness and types of agricultural production function.  |
| Week 5: | Cobb-Douglas and CES production function.  |
| Week 6: | Student's Presentations on Agriculture and Economic Development; Taking Country Specific case study.                                       |
| Week 7: |  |
| Week 8: | Schultz theory of Transformation of Traditional Agriculture, Mellors theory of Economic Development.                                       |
| Week 9: | Hayami- Ruttan innovation Model of Economic Development.   |
| Week10: | Nature and types of Risk and Uncertainty in Agriculture.   |
| Week11: | Growth Pattern of Indian Agriculture since 1950. Deceleration in the 1990s – Extent and Causes.  |
| Week12: | Deceleration in the 1990s – Extent and Causes. Regional Imbalances in Indian Agriculture. The issue of productivity in Indian agriculture, |
| Week13: | Food Security - Problem and Policy Options. Current issues in Indian agriculture. WTO and Indian agriculture.                              |
| Week14: | Student's Presentations on India's Agriculture; regional and global dimensions.  |
| Week15: |  |

| Unit Number | Course Outcome   | Learning | Teaching and Learning Activity | Assessment Tasks   |
|-------------|--|----------|--------------------------------|--|
| 1.          | Nature of Agriculture Economics and Interrelation with other sector of an economy. |          | Lecture/case study.            | Problem solving, Group discussion, Student Presentation. |
| 2.          | Role of Agriculture in Economic Development of a Country.                          |          | Lecture/case study.            | Problem solving, Group discussion, Student Presentation. |

|    |  |                           |  |
|----|--|---------------------------|--|
| 3. | Types and uniqueness of Production function in Agriculture.                      | Lecture/ Class Discussion | Problem solving, Group discussion, Student Presentation. |
| 4. | Knowledge about the transformation of Agriculture.                               | Lecture/case study.       | Problem solving, Group discussion, Student Presentation. |
| 5. | Issues concerning the Indian agriculture and its global and regional dimensions. | Lecture/case study.       | Problem solving, Group discussion, Student Presentation. |



## **ELECTIVE COURSE: ECONOMICS OF HEALTH AND EDUCATION**

**Marks: 100**  
**60 hrs**

**Duration:**

**Course Objective:** This course is designed to expose students to two key social and economic issues being faced by developing countries like India where health and education is foremost issues to be addressed.

### **Course Learning Outcomes:**

- Students would come to know about the economic aspect of Health and education.
- Empirical evidences of impact of health and education on the development of a country.
- The issues related with health and education like funding, public –private partnership and equity among classes, regions and gender.

### **Contents:**

#### **Unit I: 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,

#### **Unit II: 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.

#### **Unit III: Institutional issues in health care delivery:**

economics of health insurance, community based health insurance.

#### **Unit IV: 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

## **Unit V: 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 labour
- Duraisamy (2000): Changes in return to education in India, 1983-94y Gender, Age-cohort and Location, Center discussion paper no. 815, economic growth centre, Yale University
- 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
- GuptaI. (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

### Weekly Teaching Plan:

| Week    | Topic   |
|---------|---|
| Week 1  | Health, economic dimensions of health care - demand and supply of health care.  |
| Week 2  | Grossman's model of health care services.   |
| Week 3  | Determinants of health - poverty, malnutrition, illiteracy and lack of information.                                       |
| Week 4  | Micro effects of health, health dimensions of macroeconomics development.   |
| Week 5  | Health policy, financing of health care and resource constraints, inequalities in health - class and gender perspectives. |
| Week 6  | Institutional issues in health care delivery, economics of health insurance, community based health insurance.            |
| Week 7  | Students Presentation.  |
| Week 8  |   |
| Week 9  | Micro theories of education, Becker's theory, Mincerian equation, over education. Measuring micro effects of education,   |
| Week 10 | Signaling theory of education, New growth theories and macro-economic effects of education.                               |
| Week 11 | Human resources and human capital development empirical evidence government policies.                                     |
| Week 12 | Government funding and issues, PPP in education, the case for universal, free, primary education.                         |
| Week 13 | Structure of higher education and problems of its financing in India, other issues in education policy.                   |
| Week 14 | Students Participation.   |
| Week 15 |   |

### Facilitating the achievement of Course Learning Outcomes



| Unit No. | Course Outcomes   | Learning | Teaching and Learning Activity | Assessment Tasks  |
|----------|---|----------|--------------------------------|---|
| 1.       | Awareness about health, its economic angles and determinants  |          | Lectures                       | Problem solving, Group discussion, Student Presentation |
| 2.       | Various economic dimensions of health, its effect on development, financial and equity aspects of health. |          | Lectures, case studies         | Problem solving, Student Presentation, Group Project    |
| 3.       | Issues related to institutional delivery, insurance etc.  |          | Lectures, case studies         | Problem solving, Student Presentation, Group Project    |
| 4.       | Education; its economic dimension, micro and macro effect of education on development.                    |          | Lectures, case studies         | Problem solving, Student Presentation, Group Project    |
| 5.       | Human resource, issues related to funding of education in India.  |          | Lectures, case studies         | Problem solving, Student Presentation, Group Project    |

## **ELECTIVE COURSE: ECONOMICS OF CLIMATE CHANGE**



**Marks 100  
hours**

**60**

**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**.

**Course Learning Outcomes:**

- 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.
- Provides an Introduction to Climate Change, Efficiency, Public Goods, Externalities and Environmental Policy Instruments.
- To understand issues of discounting, Risk and Uncertainty and International Cooperation and Climate Policy

**Contents:**

**Unit I: Introduction to Climate Change**

Greenhouse Effect, The Carbon Cycle, Basic Facts on Emissions, Climate Change Observation, Climate Change Predictions, Climate Change Impacts

**Unit II: Efficiency, Public Goods, Externalities**

A brief review (preferences, utility, rates of substitution, efficiency, equilibrium, welfare theorems), Market Failure Public Goods and Externalities

**Unit III: 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

**Unit IV: Discounting**

Cost benefit analysis, market vs social discount rate, determinants, normative vs descriptive, hyperbolic discounting

## Unit V: 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

## Unit VI: Integrated Assessment

Integrated Assessment of Climate Change, Building an Integrated Assessment Model

## Unit VII: 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. Oxford University Press
- 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.

### Weekly Teaching Plan:

| Week   | Topic   |
|--------|---|
| Week 1 | Introduction to Climate Change: Greenhouse Effect, The Carbon Cycle, Basic Facts on Emissions   |
| Week 2 | Introduction to Climate Change: Climate Change Observation, Climate Change Predictions, Climate Change Impacts                                    |
| Week 3 | Efficiency, Public Goods, Externalities: A brief review of preferences, utility, rates of substitution, efficiency, equilibrium, welfare theorems |

|         |   |
|---------|---|
| Week 4  | Efficiency, Public Goods, Externalities: A brief review of Market Failure, Public Goods and Externalities   |
| Week 5  | Environmental Policy Instruments: Introduction on Instrument Choice, Bargaining, Standards and Taxes, Cap and Trade                                     |
| Week 6  | Environmental Policy Instruments: Cap and Trade vs Taxes, Cap and Trade in application—EU ETS, US   |
| Week 7  | Cost benefit analysis, market vs social discount rate, determinants, normative vs descriptive, hyperbolic discounting                                   |
| Week 8  | Test and Discussion   |
| Week 9  | Risk and Uncertainty: Risk, Expected Value, Risk Aversion, Classification of Uncertainty, Willingness to Pay for risk reduction                         |
| Week 10 | Risk and Uncertainty: learning option value, optimal mitigation levels under anticipated learning, precautionary principle, Uncertainty and discounting |
| Week 11 | Integrated Assessment of Climate Change, Building an Integrated Assessment Model  |
| Week 12 | Test and Field Visit  |
| Week 13 | International Co-operation and Climate Policy: International Environmental Agreements, Co-operative and non-co-operative abatement                      |
| Week 14 | International Co-operation and Climate Policy: Free-riding, Cartel formation, Multiple coalitions, International Climate Policy                         |
| Week 15 | Student Presentations   |

### Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Learning Outcomes                    | Teaching and Learning Activity | Assessment Tasks |
|----------|---|--------------------------------|------------------|
| 1.       | Understanding the problem of climate change | Lectures, Film Screening       | Test             |
| 2.       | Reviewing Efficiency, Public                | Lectures                       | Test             |



|    |   |                   |      |      |                  |
|----|---|-------------------|------|------|------------------|
|    | Goods, Externalities  |                   |      |      |                  |
| 3. | Understanding the different environmental policy instruments          | Lectures, studies | case | Test | Research Project |
| 4. | Understanding discounting, risk and uncertainty                       | Lectures, studies | case | Test |                  |
| 5. | Understanding integrated assessment and international climate policy. | Lectures, studies | case | Test |                  |

**ELECTIVE COURSE: LABOUR ECONOMICS**



**Marks: 100**

**Duration: 60 hrs**

**Course Objective:** To develop the 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

**Course Learning Outcomes:**

- Importance of labour as factor of production, alternative views.
- Determination of demand for labour and supply of labour and the wages, wage differentials etc.
- Labour issues in developing countries.
- Conceptual and measurement issues in labour.
- Discrimination and contemporary issues.

**Contents:**

**Unit I: Introduction to Labour Economics**

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

**Unit II: Theories of labour Economics:**

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.

### **Unit III: Issues in Labour Economics**

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.

### **Unit IV: 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.

### **Unit V: Discrimination in labour market**

Focus on gender, caste and skills. Regional pattern of employment structure. 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. .

### **Weekly Teaching Plan:**

| <b>Week</b> | <b>Topic</b>  |
|-------------|---|
| Week 1      | The labor factor in the development of economic thought: Labor in Classical and Neoclassical Economics. |
| Week 2      | Labor and Wages in Keynesian economic analysis.   |

|         |  |
|---------|--|
| Week 3  | Theories of Individual Labor Supply and Labor Demand: Aggregate labor supply analysis: Labor Force Participate trends, determinants, and analyses  |
| Week 4  | 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. |
| Week 5  | The evolving wage structure and wage differentials. Issues of Executive pay and trends in alternative pay structures.  |
| Week 6  | Short and long run trends in productivity. Productivity-Wage relationships in postwar period.  |
| Week 7  | Students Presentation-   |
| Week 8  |  |
| Week 9  | Theories of wage formation, migration,   |
| Week 10 | Lewisian transformation, discrimination and segmented labour markets. Analysis of agrarian labour markets.   |
| Week 11 | Data sources on labour and workforce and their limitations. Sectoral, gendered and locational distribution of workforce.   |
| Week 12 | Unemployment, underemployment and disguised unemployment; recent trends and patterns. Discrimination in labour market with focus on gender, caste and skills. Regional pattern of employment structure                       |
| Week 13 | Contemporary issues and emerging perspectives through recent employment reports and plan documents.  |
| Week 14 | Students Presentation-   |
| Week 15 |  |

### Facilitating the achievement of Course Learning Outcomes

| Unit No. | Course Outcomes | Learning | Teaching and Learning Activity | Assessment Tasks |
|----------|-----------------|----------|--------------------------------|------------------|
|----------|-----------------|----------|--------------------------------|------------------|



|    |   |                        |  |
|----|---|------------------------|--|
| 1. | Importance of labour as factor of production, alternative views.                              | Lectures, case         | Problem solving, Group discussion, Student Presentation. |
| 2. | Determination of demand for labor and supply of labour and the wages, wage differentials etc. | Lectures, case studies | Problem solving, Student Presentation, Group Project.    |
| 3. | Labour issues in developing countries.  | Lectures, case studies | Problem solving, Student Presentation, Group Project     |
| 4. | Conceptual and measurement issues in labour.  | Lectures, case studies | Problem solving, Student Presentation, Group Project.    |
| 5. | Discrimination and contemporary issues.   | Lectures, case studies | Problem solving, Student Presentation, Group Project.    |