

INTERNATIONAL AGRI-BUSINESS MANAGEMENT INSTITUTE  
ANAND AGRICULTURAL UNIVERSITY

ANAND – 388 110  
GUJARAT, INDIA



Dr. Y. C. Zala  
Principal & Dean

Mob: 09998009967  
E-mail: iabmi@aaui.in

Tele Fax: +91-2692-264052

**Read:** Resolution of 50<sup>th</sup> meeting of the Board of Management held on 02/05/2019, Anand Agricultural University, Anand vide Item No.50.21 has resolved as under

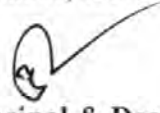
**Introducing the Ph.D (Agribusiness Management) programme at IABMI, AAU, Anand.**

**Notification**

It is hereby notified to all concerned that vide Item No.50.21 of the 50<sup>th</sup> meeting held on 02/05/2019, the Board of Management of the Anand Agricultural University has resolved as under.

“It is resolved that the Board of Management approves to start Ph.D. programme in Agribusiness Management (Annexure – A, B & C) from the academic year 2019-20 at IABMI, AAU, Anand, as per the recommendation of Academic Council vide item no. 51.13. It is also resolved that whenever ICAR recommend common Ph.D. (Agribusiness Management) Syllabus, the same ICAR Syllabus will be adopted.”

No. AAU/IABMI/PG/ 166 /2019  
Date: 23/05/2019

  
Principal & Dean

**Copy F.W.Cs.to:**

1. P.S. to Hon'ble Vice Chancellor, Anand Agricultural University, Anand
2. All Members of Board of Management of this University
3. All Members of Academic Council of this University
4. All Officers of this University
5. Registrar, AAU, Anand

**Copy to:**

1. All Principal/Dean of this University
2. Office of Registrar Examination and Academic Branch (10 Copies)
3. Director, Information Technology, AAU, Anand with request to upload the Notification on circular section of AAU website.

**“Healthy Soils for a Healthy Life”**

**Rules & Regulation for Ph.D. in Agribusiness Management**

In addition to the existing regulations (2016-17) for PG programmes of SAUs of Gujarat, following regulations for Ph.D. (Agribusiness Management) are laid as under:

1. Title of Degree :- Ph.D. Agribusiness Management
2. Number Seat :- 05
3. Eligibility :-  
65.00 marks or OGPA 6.5 out of 10.00 in Master's degree in MBA- Agribusiness Management/Agricultural Marketing & Co-operation/ Agricultural Economics/ Business Management with specialization in Agriculture & having Bachelor degree in Agriculture and allied sciences from recognized University.
4. Admission Procedure :-  
Admission is based on 50% of marks obtained in entrance test and 50% of last post-graduation degree.
5. Requirements for Ph.D Degree

Courses	Minimum Credit Requirement
Major	17
Supporting	11
Seminar	02
Research work (Thesis)	45
Total	75

6. Duration of study :  
Minimum Six semesters (regular) and eight semesters (in-service candidate)
7. Advisory committee:  
Advisory committee consisting of five members will be as follows.

1	Advisor	Chairman
2	Principal & Dean, IABMI	Member
3	Expert	Member
4	Statistician	Member
5	One Faculty member of IABMI	Member

8. Syllabus for entrance examination for Ph.D. Agribusiness Management is as suggested by ICAR (Annexure B).

**Syllabus for entrance examination of Ph.D. in ABM**  
**(As suggested by ICAR)**

**Unit 1: Basics of Management, Organizational Behavior and Human Resource Management**

The agribusiness system, management processes, planning, controlling, organizing motivating and leading; decision making; managerial skills; level of managers; organizational context of decisions; decision making models; management by objectives; organizational culture; management of organizational conflicts; managing change; leadership styles; group dynamics; motivation. Human resource planning, job analysis and design; recruitment, selection, induction and placement; human resource training and development; management development; performance appraisal and job evaluation; wage and salary administration; promotion, transfer, separation, absenteeism and turnover, employee welfare and safety; morale; personnel supervision; styles; participative management; labour management relations; negotiation and negotiating skills; conflict management.

**Unit 2: Managerial Accounting and Financial Management Cost Accounting**

Significance of Cost Accounting; Classification of Costs; Marginal Costing and cost volume profit Analysis- Its Significance, Uses and Limitations; Standard Costing - Its Meaning, Uses and Limitations; Determination of Standard cost, Variance Analysis-Material, Labour and Overhead; Accounting for Price Level Changes Concepts, CPP and CCA Methods. Budget and Budgetary Control- Its Meaning, Uses and Limitations. Budgeting and Profit Planning, Different Types of Budgets and their Preparations. Financial Statements- Ratios, Comparative and Common Size Statements, Cash Flow and Funds Flow Analysis. Fundamentals of accounting and book-keeping; objectives and functions of financial management; analysis of financial statements- balance sheet, income statement, cash flow statement; capital structure theories; concepts of components of working capital, managing working capital - cash management, dividend decision; capital budgeting, appraisal criteria- Internal Rate of Return (IRR), Benefit Cost (B-C) ratio analysis. Importance of agricultural finance; rural credit structure-demand, supply, sources and forms; estimation of credit requirement; cost of credit/capital; credit appraisal- 3 Rs and 3 Cs of credit; reforms in agricultural credit policy; innovations in agricultural financing - microfinance, Kisan credit cards; role of institutions in agri-finance - public and private sector banks; cooperatives, micro-finance institutions (MFIs), SHGs; international financial institutions; principles of agricultural financial management; successes and failures of co-operative sector in India.

**Unit 3: Marketing Management and International Marketing of Agri-products**

Agricultural marketing system, government interventions including regulated markets, buffer stock operations, price stabilization measures and policies, etc.; Forward trading and futures market; Marketing of agricultural inputs; Rural marketing; role of private sector in input and output marketing; contract farming. Product management, pricing, communication, distribution and marketing information system. International Marketing: Meaning, nature and importance; An overview of the International marketing management process and environment. International Marketing Segmentation, targeting and Positioning: Screening and selection of markets; International marketing entry strategies: Export- licensing, contract manufacturing, joint venture, setting up of wholly owned subsidiaries abroad. International Product and Pricing Strategies: Product standardization vs. adaptation; International trade product life cycle, Factors affecting International price determination; Managing International Distribution and Distribution channel strategy. International promotion strategies: communications across countries, international promotion mix-advertising, personal selling, publicity and sales promotion; Standardization vs. adaptation issue. International marketing planning, organizing and control; ecological concerns and international

marketing ethics. Key concepts in agri-export, procedures for export planning; analysis of export markets, tools and techniques; for optimizing the export functions.

#### **Unit 4: Production, Operations and Quality Management**

Operations management of an agro-industrial unit including operations system and processes; productivity of operations; work force productivity; facilities management; operations planning and control; material and supply chain management; quality management. Importance of quality in the globalized market place, significance of managing quality in manager's total field of concerns. An introduction to Agmark, BIS, ISI and FPO. GMP/G (good manufacturing and hygienic practices), TQC/TQM (total quality control and total quality management), SQC (Statistical Quality Control), product quality monitoring, HACCP (hazard analysis and critical control points), Codex alimentarius (international quality standards), ISO-9000-standards and certification. Food standards, legislation and internal auditing. Entrepreneurship for Small Scale Enterprises (SSE); Entrepreneurial Competencies; Institutional Interface. Establishing Small Scale Enterprises: Opportunities Scanning-Choice of Enterprise; Market Assessment for SSE; Choice of Technology and Selection of Site. Small Scale Enterprises-Getting organized: Financing the New/Small enterprises; preparation of the business plan; ownership structure and organizational framework. Financial management issues in SSE; Operations management issues in SSE; Marketing management issues in SSE; Organizational relations in SSE. Management Performance assessment and control; Strategies for stabilization and growth; Managing family enterprises.

#### **Unit 5: Managerial Economics**

Scope of managerial economics, objective of the firm and basic economic principles; Consumer theory. Demand analysis - meaning, types and determinants of demand; demand function; demand elasticity; demand forecasting need and techniques. Production, cost and supply analysis- production function, least-cost input combination, factor productivities and returns to scale, cost concepts, cost-output relationship, Pricing-determinants of price pricing under different market structures The national income; circular flow of income; consumption, investment and saving; money-functions, demand & supply; inflation; economic growth; business cycles and business policies; Recent developments in the national and international economic and agricultural scenarios.

#### **Unit 6: Operations Research and Research Methods**

Objectives, types, and process of research; Problem formulation; Scales of measurement; Sampling, Types of sampling - Probability and non-probability sampling techniques, sample size determination, sampling and nonsampling errors. Role and uses of quantitative techniques in business decision making, Use of introductory statistics, Report writing. Linear Programming: Objective, Assumptions, Formulation of Linear Programming Problem, Graphic Method, Simplex method; Transportation and Assignment Problems; Inventory control Models, Costs Involved in Inventory Management, Types of Inventory; Waiting Line Models: Waiting Line Problem, Characteristics of a Waiting Line System; Decision making under Risk and uncertainties, Decision tree ; Game Theory- Two -Person Zero-Sum Game; Simulation; Network analysis -PERT & CPM, Markov Chains.

#### **Unit 7: Agribusiness Environment and Policy**

Role of agriculture in Indian economy; problems and policy changes relating to farm supplies, farm production, agro processing, agricultural marketing, agricultural finance etc. in the country. Agribusiness - definition and nature, components of agribusiness management, changing dimensions of agricultural business. Structure of Agriculture - Linkages among sub-sectors of the Agribusiness sector; economic reforms and Indian agriculture; impact of liberalization, privatization and globalization on Agri-business sector. Emerging trends in production, processing, marketing and exports; policy controls and regulations relating to the industrial sector with specific reference to

agro-industries. Agribusiness policies- concept and formulation; and new dimensions in Agri-business environment and policy. Agricultural price and marketing policies; public distribution system and other policies. International trade- basic concepts.

#### **Unit 8: Strategic Management**

Strategic management - meaning, concept and scope; framework for strategic management; industrial (external) and organizational (internal) environmental factors influencing strategy; scanning the external and internal environment; core competencies and resource strengths; SWOT analysis; strategy formulation and implementation; generic strategies; strategy and technology, strategy and leadership, total quality management, the customer resource, creating competitive advantage, evaluation of strategy.

#### **Unit 9: Project Management and Entrepreneurship Development**

Concept, characteristics of projects, types of projects, project identification, and Project's life cycle; Project feasibility- market feasibility, technical feasibility, financial feasibility, and economic feasibility, social cost-benefit analysis, project risk analysis; Network Methods; Project scheduling and resource allocation; Financial appraisal/evaluation techniques; Project control and information system. Entrepreneurship, Significance of entrepreneurship in economic development qualities of entrepreneur, entrepreneurship development programs and role of various institutions in developing entrepreneurship, life cycles of new business, environmental factors affecting success of a new business, reasons for the failure and visible problems for business, Developing effective business plans, Procedural steps in setting up of an industry.



**Syllabus of Ph.D. Agribusiness Management**

Course Code	Course Title	Credits
ABM-601	Advance Research Methodology	2+1
ABM-602	Data Analysis	2+1
ABM-603	Strategic Human Resource Management	2+0
ABM-604	Organizational Development	2+0
ABM-605	Conflict management and Negotiation	2+0
ABM-606	Advances in Organizational behavior	2+0
ABM-607	Crafting and Executing Competitive Strategy	2+0
ABM-608	Labour economics	2+0
ABM-609	e-Business and e-Commerce Management	2+0
ABM-610	Agribusiness and Agricultural Rural Marketing	2+0
ABM-611	Sales Management	2+0
ABM-612	Consumer Behavior	2+0
ABM-613	Integrated Marketing Communication	2+0
ABM-614	International Marketing Management	2+0
ABM-615	Financial Market and Services	2+0
ABM-616	Rural and Agriculture Finance	2+0
ABM-617	Advanced Operation Research	2+0
ABM-618	Advanced Entrepreneurial Development	2+0
ABM-619	Advanced Production & Operation Management	2+0
ABM-620	International Trade	2+0
ABM-621	Export-import and Logistics Management	2+0
ABM-622	Dynamics of Rural Development	2+0
ABM-623	Advanced Business Ethics	2+0
ABM-624	Econometric for Agribusiness Management	2+0
ABM-625	Agribusiness and Climate Change	2+0
ABM-695	Seminar -1	1+0
ABM-696	Seminar -2	1+0
ABM-699	Course work	45+0

<b>ABM-601</b>	<b>Advanced Research Methodology</b>
Objective	The objective of this course is to develop an understanding of research methodology. The focus will be on research problem and techniques of research.
Unit 1	Introduction, Research and its process, Formulating a research problem – reviewing the literature, formulating a research problem, identifying the variables, constructing hypothesis
Unit 2	Conceptualizing a research design- research design, selecting a study design, quantitative & qualitative design, action research, feminist research, participatory and collaborative research enquiry
Unit 3	Constructing an instrument for data collection – selecting a method of data collection, collecting data using attitudinal scales, establishing the validity and reliability of a research instrument
Unit 4	Selecting a sample – concept of sampling, terminology & principles of sampling, types of sampling, qualitative and quantitative research sampling
Unit 5	Collecting data – ethics, stakeholders in research, ethical issues to concerning research participants, the researcher, the sponsoring organization
Unit 6	Processing and displaying data – processing data in qualitative & quantitative research, Displaying data – text, tables and graphs.
Unit 7	Writing a research proposal – preamble, problem, objectives, hypothesis, study design, the setting, measurement procedures, ethical issues, sampling, structure of the report, problems and limitation
	<b>References</b>
	Research Methodology, Ranjit Kumar, Sage South Asia Edition Research Methodology, C R Kothari, New Age International Publishers Research Methods, William M K , Biztantra , Atomic Dog Publishers Ideas into Research, Barbara Fawcett & Rosalie Pockett, Sage Publication

<b>ABM-602</b>	<b>Data Analysis</b>
Objective	The objective of this course is to develop an understanding of research methodology. The focus will be on sampling and techniques of quantitative and qualitative research.
Unit 1	Measures of dispersion, range, deviation, coefficient of variation, standard error, its computation & its uses.
Unit 2	Correlation and regression: Simple, Rank, Partial, Multiple, Infraclass correlations, Furnivall Index and coefficient of determination. Linear and nonlinear regressions, parabolic, exponential, power and logarithmic functions.
Unit 3	Sampling-Theory and applications. Multivariate statistical techniques. Multivariate Analysis of Variance. Principal Component Analysis. Factor Analysis. Cluster Analysis. Discriminant Function Analysis. Conjoint Analysis. Propensity Score Matching (PSM).
Unit 4	Introductory: Statistics scales of measurement, concept of graphical, exploratory and inferential data analysis. Probability and probability distributions: Review of probability theory, concept of random variable and expectation, probability distributions (Binomial, Poisson, Normal, Weibull).
Unit 5	Estimation and Testing of Hypotheses, Concept of point and interval estimation, estimators and estimates, properties of good estimators–unbiasedness and minimum variance, tests of significance – t, F, z, and Chi square, testing significance of correlation and regression coefficients, analysis of variance (ANOVA) – one way and two way Classification with single and more than one cell frequency.

Unit 6	Introduction to non-parametric statistics, the sing test for paired data, Rank sum tests, the mann-whitney $\mu$ test, kruskal wallis test, the one sample runs test, rank correlation, kolmogorov simirnov test, goodness of fit test
Unit 7	Qualitative Research – concepts, reliability and validity, preoccupation, critique, Ethnography and participation observation, interviewing in qualitative research, focus group, language in qualitative research, documents as a sources of data, qualitative data analysis. The linear probability model. The Logit Model. The Probit Model. The Tobit Model.
	<b>References</b>
	Business Research Methods, Alan Bryman, Emma Bell, Oxford Publication Quantitative Techniques Management, N D Vohra, McGrawHill Statistics for Management, Richard Levin & David Rubin, Pearson Qualitative Research & Evaluation Methods, Michael Patton, Sage Publication Statistical Methods, S C Gupta, Sultan & Chand Publication Basic Econometrics, Damodar N., Gujarati & Sangeeta, Fourth Edition, The McGrawHill Company, New Delhi Agricultural Price Analysis and Forecasting, Goodwin JW, Willy 1994

<b>ABM-603</b>	<b>Strategic Human Resource Management</b>
Objective	The objective of the course is to develop perspective of strategic human resource management in changing forms of organization. Understanding the relationship of HR strategy with overall corporate strategy as well as strategic role of specific HR systems.
Unit 1	Introduction, Business strategy and organizational capability, global environment of human resource in the context of change and diversity.
Unit 2	Framework of SHRM- HRM, Strategy concept and process, SHRM concept and process, HR Strategies
Unit 3	SHRM in action, formulating and implementing HR strategies, improving business performance through SHRM, Roles in SHRM
Unit 4	HR Strategies for improving organizational effectiveness, reducing strategies, learning and development strategy, strategies for managing performance, Reward strategy, employee relation strategy, Corporate ethics, values and SHRM
	<b>References</b>
	Strategic Human Resource Management, Michel Armstrong, Knog Page press Strategic Human Resource Management, Jeffrey Mello, Southen West

<b>ABM-604</b>	<b>Organizational Development</b>
Objective	The purpose of this course is to learn to plan and implement change at the individual, group and organizational level. The course is designed to help the students develop as potential change agents and OD professionals.
Unit 1	Introduction – need, history, nature, characteristics of OD, Framework of OD, OD practitioners and challenges
Unit 2	Foundation : Organizational Design, Organizational climate, Organizational culture, organizational change, system change or culture change, managing change
Unit 3	OD and change in performance, strategies for Processes, Action research, Organizational Diagnosis, Estimating successes of strategy
Unit 4	Intervention , types of intervention, techno structural intervention, strategy intervention, planning and training intervention, role and team intervention, learning and large scale intervention,



Unit 5	Future of OD, ethics for OD, Research for OD, organization theory, focus and purpose, managerial control, group dynamics, bureaucracy, futuristic trends
	<b>References</b>
	Organizational Development, Krishnamacharyulu and ramakrishnan, PHI Organizational Development, S Ramnarayan and T V Rao, Sage publication Management of Organizational Change, K Harigopal, Sage Publication Organizational Development, Laxmi Devi, Anmol Publication

<b>ABM-605</b>	<b>Conflict Management and Negotiation</b>
Objective	This course is design to understanding the concept and theories of conflicts, level of conflicts; critical issues in conflict resolutions, skills required in negotiations process and collective bargaining & emerging scenario.
Unit 1	Introduction to conflict management – understanding, component of conflict, types of conflict, models of conflict, functional and dysfunctional conflict, conflict and performance
Unit 2	Level of conflicts, intrapersonal, interpersonal, Group/team conflicts, organizational conflicts, Sources of conflict – intra/interpersonal, group/team, organizational conflict
Unit 3	Managing interpersonal conflict, team and organizational conflict, Third party conflict resolution, Conflict Resolution process
Unit 4	Negotiation – foundation, nature, theoretical perspectives, types, process, qualities, skills of effective negotiator, factors for negotiation breaks down, Interpersonal negotiation, consumer negotiation, organizational negotiation, community negotiation, tricks used in negotiation, psychological factor used, counter methods, issue in negotiation
Unit 5	Paradox of conflict and creativity, assessing the cost of workplace conflict, dealing with personality conflicts and problem employees, integrating the art with science of negotiation
	<b>References</b>
	Corporate Conflict Management, Nelson Omiko, PHI Negotiation, Michael Spangle, Sage South Asia International Organisations: Their Role in Conflict Management, Peter Dahl Thruelsen (ed.) CONFLICT MANAGEMENT IN THE WORKPLACE, Shay and Margaret McConnon, British Library Cataloguing in Publication Data.

<b>ABM- 606</b>	<b>Advances in Organizational behaviour</b>
Objective	This course introduces students to the study of organizational behavior at individual, group and organizational level.
Unit 1	Introduction to Organizational behaviour – Organization & Manager, Organizational & individual, various trends in OB, Organizational process & its levels, Changing context of organization, globalization, IT, Diversity, CSR & ethics, Positive perspectives, positive thinking & intervention
Unit 2	Individual – foundation of individual behavior, personality and personal effectiveness, learning process, motivation process, managing work motivation, perceptual process, attitudes and values, attribution process in relation internality and optimism
Unit 3	Roles – Roles and role effectiveness, coping with frustration, stress and burnout, decisional process and consensus building, Transactional analysis and managerial interpersonal styles

Unit 4	Team – Dynamics of group behavior, effective work team, conflict management, developing collaboration, leadership- theories and model
Unit 5	Organization – organizational structure, communication, power and politics, organizational culture and climate, organizational learning and learning organization, organizational change and development
	<b>References</b>
	Understanding organizational behavior, Susma Khanna, Oxford University Press Organizational behavior, Kavita Singh, Pearson Organizational behavior, Robbins, Pearson

<b>ABM-607</b>	<b>Crafting &amp; Executing Competitive advantage strategy</b>
Objective	This course is providing a critical business implications and opportunities arising from growing social and environmental concerns. It also helps in enhancing student's ability to integrate social/environmental concerns into business operations and develop skills for applying concepts to the solution of business problems
Unit 1	Tools of strategic analysis – strategy and the strategic management process, competitive advantage, measuring competitive advantage, emergent vs intended strategies, evaluating firms capabilities, analyzing internal & external environment,
Unit 2	Five generic competitive strategies , Business strategy, cost leadership, product differentiation, focus strategies, strategies choices, collaboration, merger, acquisition
Unit 3	Vertical integration – Value of vertical integration, sustained competitive advantage, organizing to implement vertical integration
Unit 4	Competing in foreign markets- expand to foreign market, cross country differences, concept of MNCs and global competition & its strategy, Tailoring strategy & Diversification strategies – competing in emerging industries, turbulent, high velocity markets, maturing industries, fragmented industries, strategies for sustain rapid growth, industry leader, runner up firms, weak and crisis ridden businesses
Unit 5	Strategy ethics and social responsibility, building resources strengths and organizational capabilities, managing internal operation for better implementation of strategy, corporate culture and leadership
	<b>References</b>
	Crafting and executing strategy by Arthur A Thompson Jr, tata McGrawhill Strategic Management and competitive advantage concept by Jay B Barney, Eastern Economy edition Global Strategic Management, K Mehelani, Oxford University, New Delhi

<b>ABM-608</b>	<b>Labour Economics</b>
Objective	The aim of this course is cover a systematic development of theory of labour supply, labour demand and human capital as well as wage and employment determination, turnover, immigration, unemployment, equalizing differences and institutions in labour market.
Unit 1	Introduction - basic of Labour economics, positive economics & its different models, normative economics and government policy, Overview of labour market- definitions, facts, trends, working of market & its theory

Unit 2	Demand & Supply for labour – Profit maximization, Short run demand of labour, market competitiveness, Policy application & its impact, Labour demand elasticities, The own wage elasticity of demand, cross wage elasticity of demand, effects of minimum wage laws, Frictions in labour market, employment hours trade off, training investments, hiring investment, supply of labour to the economy, theory of the decision to work, policy application, labour supply as household production, the family and the life cycle, policy application as child care and labour supply
Unit 3	Compensating wage differentials and labour markets, job matching, hedonic wage theory and its risk vs benefits, employer preferences, joint determination of wage and benefits, investment in human capital – education and training, basic model, demand of higher education, education as investment, education and earning, worker mobility – migration, immigration and turnover, pay and productivity – wage determination within the firm, motivating worker, productivity and pay, level of pay, sequencing pay,
Unit 4	Gender, race and ethnicity in the labour market, measured and unmeasured sources of earning differences, theories of market discrimination, union and the labour market, union structure and membership, union activities and tools of collective bargaining, effect of unions
Unit 5	Unemployment, stock flow model of labour market, sources of unemployment, frictional unemployment, structural unemployment, cyclical unemployment, seasonal unemployment, inequality in earnings, measuring inequality, underlying causes of growing inequality, labour market effects of international trade and production sharing
	<b>References</b>
	Modern labour economics by Ronald Ehrenberg & Robert Smith 11 <sup>th</sup> edition, Prentice hall Labour Economics By S. P Singh, Labour Economics by George J Borjas, 7 <sup>th</sup> edition, McGrawhill

<b>ABM-609</b>	<b>E-Business and E-Commerce Management</b>
Objective	This course is designed to introduce e-business and e-commerce and their relevance to businesses and consumer. It also covers e-business infrastructure, strategy, application & implementation.
Unit 1	Introduction to e-business and e-commerce, difference, opportunities, drivers, risks and barriers to business adoption
Unit 2	Marketplace analysis for e-commerce, e-commerce environment, location of trading in the market place, business models for e commerce, auction sales model, e-business infrastructure components, internet technology, web technology, software application, internet governances, managing e-business infrastructure
Unit 3	E-environment, social and legal factors, green issues, taxation, economic and competitive factors, political factors, e government, E-business strategy, strategic analysis, strategic objectives, strategic decision, implementation
Unit 4	Supply chain management, the value chain, option of restructuring the chain, supply chain management and implementation, E-procurement, drivers of e procurement, estimating e-procurement costs, barriers, risks and implementation
Unit 5	E-marketing, planning, situation analysis, objective setting, strategy, digital media communication, tactics, online branding, actions and control, customer relationship management, online buying process, customers acquisition management, social media and CRM strategy, service quality, customer

	extension, Technological solution for CRM, change management, analysis and design, process modeling, data modeling, security design for e business, E-business service implementation and optimization
	<b>References</b>
	e-business and e-commerce management, by Dave Chaffy, Pearson E-Marketing, by Judy Straues, 7 <sup>th</sup> edition, Prentice Hall Digital Marketing, Vandana Ahuja, Oxford University Press Fundamentals of Digital Marketing, Puneet Singh Bhatia, Pearson education

<b>ABM-610</b>	<b>Agribusiness and Rural Marketing</b>
Objective	This course is designed to understand the rural environment, rural consumer behavior and different strategies applied in development of agribusiness and rural marketing.
Unit 1	Introduction to agribusiness management, importance for developing countries. National business environment. Historical perspective of globalization of business and concept of globalization and international business.
Unit 2	Alternative modes of business expansion, strategic trade offs and their selection strategy. Framework of international marketing, market identification, segmentation and targeting and entry mode decisions and international marketing mix decisions. Conceptual frame work of e-business technology and environment, e-business applications and models, and alternative e-business strategies.
Unit 3	Agricultural marketing, Agricultural marketing organizations, cooperative management, cooperative marketing, BIS, marketing of agricultural inputs
Unit 4	Understanding rural market environment, rural-urban divide, rural marketing challenges and opportunities, structure and relationships of formal and informal markets, periodic markets, rural marketing strategy – consumer durables and non-durables, product planning, product mix, pricing, distribution strategy
Unit 5	Rural consumer's behavior, Reference groups and family influences, social class, culture influence, sub culture, cross cultural consumer behavior, Promotion and communication strategy, media planning, distribution channels, organizational and personal selling, innovation in rural marketing
	<b>References</b>
	The Rural Marketing, Pradeep Kashyap & Siddharth Raut Rural Marketing by Sanal Kumar Velayudhan Marketing as Strategy by Nirmalya Kumar We are like that only – Understanding the Logic of Consumer India by Rama Bijapurkar How India Earns, Spends and Saves - Unmasking the Real India by Rajesh

<b>ABM-611</b>	<b>Sales Management</b>
Objective	This course is accomplishing sales management, sales personnel/team involvement, formulation of strategies for product line, on pricing, distribution channel/network.
Unit 1	Personal selling and, Sales Management, Business enterprise, Salesmanship, setting personal selling objectives, determining sale related Marketing policies, formulating personal selling strategy
Unit 2	Organizing the sale efforts, effective sales executive, sales organization, sales department relations, distributive-network relations
Unit 3	Sales force management, personnel management in the selling field, recruiting



	sales personnel, selecting sales personnel, planning sales training programs, executing and evaluating sales training programs, motivating sales personnel, compensating sales personnel, managing expenses of sales personnel, sales meeting and sales contests, controlling sales personnel
Unit 4	Controlling the sales, sales budget, quotas, sales territories, sales control and cost analysis
Unit 5	International sales management, culture, formulating international strategy, organization structures, evaluation and control
	<b>References</b>
	Sale Management, Still, Cundiff and Govoni, PHI Sales Management: Analysis and Decision Making, Ingram, Cengage Learning. Sales & Distribution Management, Krishna K.Havaladar and Vasant. M. Cavall, TMH. Fundamentals of Sales Management, "Ramneek Kapoor", Macmillan. Management of a Sales Force, "Spiro, Stanton and Rich". TMH. Sales Management: In the Indian Perspective, "Vaswar DasGupta", PHI.

<b>ABM-612</b>	<b>Consumer Behavior</b>
Objective	This course provides the background and the tools for a strong and comprehensive understanding of consumer behavior, consumer psychology, social and cultural dimension, consumer decision making.
Unit 1	Consumer behavior, impact on current world, consumer research, market segmentation
Unit 2	Consumer motivation, personality and consumer behavior, consumer perception, consumer learning, consumer attitude formation and change, communication and consumer behavior
Unit 3	Reference groups and family influences, social class, culture influence, sub culture, cross cultural consumer behavior
Unit 4	Consumer influence and diffusion of innovations, consumer decision making and beyond
	<b>References</b>
	Consumer Behavior , Schiffman and Kanuk, PHI Consumer Behaviour and Advertising Management , Matin Khan, NEW AGE INTERNATIONAL (P) LIMITED, PUBLISHERS Consumer Behavior, Atul Kr Sharma, Global Vision Publishing House Consumer Behavior, Raju M.S , Vikas Publishing House Pvt. Ltd.

<b>ABM-613</b>	<b>Integrated Marketing Communication</b>
objective	This course covers promotional function and the growing importance of advertising and other promotional elements, IMC perspectives, global perspectives, ethical perspectives, diversity perspectives as well as upcoming new career profiles.
Unit 1	Introduction to integrated marketing communication, role of integrated marketing communication process, analysis of integrated marketing programme, consumer behavior prospective
Unit 2	Communication process, source, message, channel factors, establishing objectives and budgeting for promotional program
Unit 3	Developing integrated marketing communication by creative strategy – planning, development, implementation and evaluation, media planning, evaluation of broad cast media, printing media, support media, direct marketing,

	internet and interactive media, sales promotion, public relation, publicity and corporate advertising, personal selling
Unit 4	Measuring the effectiveness of the promotion program – monitoring, evaluation and control, international advertising and promotion, regulation of advertising and promotion, evaluating the social, ethical and economic aspects of advertising and promotion
	<b>References</b>
	Advertising and promotion, G Belch and M Belch, Tata McGraw Hills Marketing Communications: Contexts, Strategies and Applications, Fill, C., Pearson Strategic Marketing Communications, Smith, P., Perry, C. and Pulford, A., Kogan Page

<b>ABM-614</b>	<b>International Marketing Management</b>
Objective	This course covers general and competitive business environment of different countries, core competencies which create competitive advantage, estimating resource and capabilities required form international market
Unit 1	Introduction, Market potential of countries, International organization, International trading, International competitive advantage and buyer's profile, International environment for business, customer, competition and controls
Unit 2	International pricing, international business to business marketing, international Marketing of services, international strategic marketing, international stake holders, international brand, international marketing concepts
Unit 3	Marketing competitive forces worldwide, advertising and promotion in international markets, international public relation, international marketing research, distribution of goods worldwide
Unit 4	international markets for the 21 <sup>st</sup> century, import and exports, international management for marketing personnel, international marketing audit, international collaboration, control s and global manufacturing
	<b>References</b>
	International marketing management, U.C. Mathur, Sage publication International Marketing, Warren Keegan, Pearson Education Asia Ltd and Tsinghua University Press. Strategic Planning for Export Marketing, Franklin R Root Scranton, International Textbook Co. International Trade and Investment, Franklin R Root Scranton, International Textbook Co. International Marketing Management, Philip Kotler Prentice-Hall International, Inc Prentice-Hall International, Inc International Marketing, Philip R Cateora and John L Graham Irwin/McGraw-Hill, Boston International Marketing (Analysis and strategy): Sak Onkvisit & John J Shaw, Pearson Education Asia Ltd and Tsinghua University Press. International Marketing, Vern Terpstra and Ravi Sarathy New York Holt, Rinehart and Winston Inc

<b>ABM-615</b>	<b>Financial Market and Services</b>
Objective	This course includes the financial market and services in India which is the very crucial part of Indian financial system which give ideas about the working of financial system of India.
Unit 1	Introduction and Structure of Financial System, the Financial System and the Economy, Reforms in the financial system, current financial system in India.
Unit 2	Financial Markets: Introduction and structure of financial market, Capital Markets, Money Markets, Primary Market, Secondary Market, Derivatives Market, Debt Market, Public sector undertaking bond market, Government securities market – Regulation – Functions of Stock Exchanges – Listing – Formalities – Financial Services Sector Problems and Reforms.
Unit 3	Financial Institutions: Introduction, evolution and changing role of financial institutions, Development Banking Institutions Viz. IDBI, IFCI, ICICI, IRBI, NABARD, SIDBI, and EXIM Bank. Banking and Non banking financial institutions, Mutual Funds
Unit 4	Financial Services: Concept, Nature and Scope of Financial Services, Regulatory Frame Work of Financial Services, Growth of Financial Services in India, Investment banking, Merchant Banking, Depositories and custodians, Credit rating, Factoring and forfeiting, Leasing and Hire Purchas, Venture Capital Fund Financial inclusion and Microfinance
Unit 5	Financial instruments: Concept and types of financial instruments, Capital Market Instruments, Money Market Instruments and New and Innovative Financial Instruments
	<b>References</b> Das, Subhash Chandra, "The financial system in India: Markets, Instruments, Institutions, Services and Regulations" ISBN: 978-81-203-5069-4, PHI publication New Delhi. Pathak Bharti "Indian Financial System" ISBN: 987-93-325-1800-1, Pearson Publication, New Delhi. Padmalatha Suresh and Justin Paul "Management of Banking and Financial Services" ISBN: 978-81-317-3094-2, Pearson Publication, New Delhi.

<b>ABM-616</b>	<b>Rural and Agriculture Finance</b>
Objective	The course is designed with the intention that it covers understanding and concept of rural and agriculture finance and how to implement it with the best possible way which is included.
Unit 1	Rural finance: Meaning, definition, features and importance, present overview, Key Challenges in Rural Finance, safety of rural finance, sources of finance. Role of rural finance for agricultural and economic growth, food security and poverty reduction.
Unit 2	Agriculture finance: overview to agriculture sectors in India, History of financing agriculture in India, Agriculture credit, problems and prospects, demand and supply of agriculture finance, rural credit to non-farm sectors, challenges for expanding agriculture finance, current status of agricultural finance, Commercial banks, nationalization of commercial banks. Lead bank scheme, regional rural banks, scale of finance. Higher financing agencies, RBI, NABARD, AFC, Asian Development Bank, World Bank, Insurance and Credit Guarantee Corporation of India. Risk analysis of agriculture and rural loan, type of risks in agricultural finance.

Unit 3	Risk in Agriculture, History of Crop Insurance in India, Crop Insurance Design Considerations, Yield Index based Underwriting and Claims, National Agricultural Insurance Scheme, Pradhan Mantri Fasal Bima Yojana, Unified Package Insurance Scheme, Role of crop insurance for agricultural growth, challenges for expanding crop insurance, current status of crop insurance.
Unit 4	Government policies: role of government institution in rural credit, non government, semi government, quasi government institutions: growth and present trends, study of government schemes for rural assistance.
Unit 5	Micro finance, Micro finance Institution (MFI), Regulatory framework for MFI, Sustainability of MFI, Linkages between Banks and MFI, Progress and Performance of 'SHG, Bank Linkage Programme' in India, Concept of SHG Federation, Financial Inclusion and SHG.
	<b>References</b> Ghosal, S.N., "Agricultural Financing in India", Asia Publishing House, Bombay, Subba Reddy, S. and P.Raghuram., "Agricultural Finance and Management", Oxford & IBH Publishing Company Private Ltd, New Delhi Muniraj, R., "Farm Finance for Development", Oxford & IBH Publishing Company Private Ltd., New Delhi, Narendra K. Rustagi "Crop Insurance in India: An Analysis" BR Publishing Corporation Narasimhan Srinivasan, "State of Rural Finance in India: An Assessment", Oxford University Press

<b>ABM-617</b>	<b>Advanced Operation Research</b>
Objective	The course is designed with the intention to mathematically establish theories and algorithms to model and obtain optimum and highly efficient results. Focus will be on understanding different techniques to solve business problems
Unit 1	Introduction, Linear programming- application and model formulation, Graphical method, simplex method, Duality in Linear programming, sensitivity analysis, integer Linear Programme
Unit 2	Goal programming, Transportation program, assignment problem, decision theory and decision trees, Theory of games.
Unit 3	Project management : PERT and CPM, deterministic inventory control models, probabilistic inventory control models, queuing theory, replacement and maintenance models, Markov chains, simulation, sequencing problems, information theory, dynamic programming, classical optimization methods
Unit 4	Non-linear programming methods, theory of simplex method, revised simplex method, dual-simplex method, Bounded variables LP Problem, parametric linear programming
	<b>References</b>
	Operations Research-Theory and application by J k Sharma, Trinity Press
	Principles of Operation Research – Managerial Decision by H M Wagner, PHI

<b>ABM-618</b>	<b>Advanced Entrepreneurial Development</b>
Objective	This course is designed to enhance the knowledge for establishment of new venture. Focus will be on methodology for developing new projects and encouraging them to study new ventures.
Unit 1	Introduction, entrepreneurship, women entrepreneurship, rural entrepreneurship, Tourism entrepreneurship, Medical tourism, agri-preneurship, social entrepreneurship, family business, factor affecting



	entrepreneurship growth, entrepreneurship development programmes (EDPs)
Unit 2	Micro and small enterprises, opportunity identification and selection, formulation of business plans, project appraisal, financing of enterprise, forms of business ownership, institutional finance to entrepreneurs, lease financing and hire purchase, institutional support to entrepreneurs, taxation benefits to small scale enterprises, government policy
Unit 3	IPR and MSMEs, growth strategies in small scale enterprises, sickness in small enterprises, e-commerce and small enterprises, franchising, SRB, CSR
	<b>References</b>
	Entrepreneurship, Arya Kumar, Pearson Cases in Entrepreneurship, Eric A Morse, Sage South Asia edition

<b>ABM-619</b>	<b>Advanced Productions &amp; Operations Management</b>
Objective	The objective of this course is to expose the learner to the field of production and operations management. The focus will be on imparting knowledge of the basic concepts, tools, and functions of production management.
Unit 1	Production and Operations Management about managing process, characteristics, activities of Production and Operations Management. The role of operations function, Operations performance objectives, speed, dependability, flexibility, cost and performance. What is strategy and what is operations strategy? The 'top-down' perspective. The 'bottom-up' perspective, The market requirements perspective, The operations resources perspective. The process of operations strategy.
Unit 2	Process Design: The design activity; Process types – the volume–variety effect on process design; Detailed process design; The effects of process variability, Design of products and services: why is good design so important? Concept generation; Concept screening; Preliminary design; Design evaluation and improvement; Prototyping and final design, the benefits of interactive design. Scheduling, Work study, method study, work measurement, types of interface design, CAD, CAM, Cloud Operations Management
Unit 3	Manufacturing system and types, Product selection, design and development, Productivity, Capacity planning, Industrial safety. Meaning and Dimensions of Quality, Quality Control Techniques, Quality Based Strategy, Total Quality Management (TQM), Towards TQM – ISO 9000 as a Platform – Working with Intranet, Total Productive Maintenance (TPM), Accepting sampling, Statistical Process Control, ISO standards and their importance, Introduction to reengineering, value engineering, Check sheets, Pareto chart, Ishikawa charts, Six sigma, Lean Management, Reliability Engineering, Safety engineering, Fault tree analysis
Unit 4	Inventory management, Purchase management, Supply Chain Management, Logistics Management, Maintenance Management, Store Management, Material Management, Safety Management in reference to Production and Operations Management
Unit 5	Value creation, Quality service delivery, efficient service delivery, Performance measurement, role of technology, Production and Operations Management in the developing world. Business Process Modelling, Data Driven Approach to Process Definition. Logical vs. Physical Database Modelling, Business Process, the Way Forward

	<b>References</b>
	Adam & Ebert. 2006. Production and Operations Management: Concepts Models and Behaviour. 5th Edition. Prentice Hall of India Buffa ES. 2008. Modern Production/Operations Management. Wiley India Stevenson WJ. 2005. Operations Management. Tata McGraw Hill.

<b>ABM-620</b>	<b>International Trade</b>
Objective	The Course deals with the theory and practice of international trade and trade related policies. The objective is to provide students with a through grounding in the theory of international trade as well as international trade policies and to demonstrate the relevance of the theory in the analysis of existing patterns of international trade and its determinants and conduct of trade policy and its economic implications.
Unit-1	Globalization and International Business - Introduction, Globalization of Business: A historical Perspective, Concept of Globalization, Measuring Globalization, Support and Criticism of Globalization, Response Strategies to Globalization Forces for Emerging Market Companies, Domestic Versus International Business, Managing Business in Globalization Era
Unit-2	World Trade Organization - WTO Agreements: An Overview, Ministerial Conferences and Emerging Issues, The Deadlock in WTO Negotiations, GATT/WTO System and Developing Countries, SPS and TBT Measures
Unit-3	Policy Framework for International Trade - Introduction, Trade Policy Options for Developing countries, Instruments of trade policy, India's Foreign Trade Policy, Policy Initiatives and Incentives by the State Governments, WTO and India's Export Promotion Measures, relationship between trade, investment and economic growth and congruence of trade policies.
Unit-4	Theories of International Trade -Classical Theory of Comparative Cost Advantage, Haberler's Theory of Opportunity Cost, Heckscher –Ohlin Theory, Leontiff's Paradox and its Criticism, Stolper Samuelson's Theorem, Rybczynski Theorem, Vernon's Product Cycle Theory, technological Gap theory, Vent for Surplus Theory, Gains from Trade and Terms of Trade, Prebisch-Singer Thesis, Implications of Trade theories
Unit-5	Commercial Policy - Free Trade vs Protection, Tariffs, Quotas, Dumping, Exchnage Control, Theory of Customs Union,Economic Integration, Types of Regional Trade Arrangements (PTA, FTA, CM, CU, EU), Limitations of Regional Economic Integrations, India's participation in Regional Trade Arrangemets, Regional Trade Arrangements via a vis Multilateral Trading System under WTO
Unit-6	Institutional Framework for International Business -International Economic Institutions, Organizations for International Trade Promotions, Institutional Framework for International Trade in India, International Political and legal Environment, Risks in International Business
Unit-7	International Marketing -Country Evaluation and Selection, Modes of International Business Expansion, FDI, Multinational Enterprises, Framework of International Marketing, Market Identification: Segmentation and Targeting, Entry Mode decisions,International Marketing Mix- Identification of Markets, Product Policy, International Product Life Cycle, Promotion Strategy, Pricing Strategy and Distribution Strategy; Various Forms of International Business; Marketing of Joint Ventures and Turnkey Projects

	<b>References</b>
	<p>Rakesh Mohan Joshi, International Business, Oxford University Press, New Delhi, 2009</p> <p>Ram Singh, International Trade – Operation, Excel Books, New Delhi, 2009</p> <p>P. Subba Rao, International Business – Text &amp; Cases, Himalaya Publishing House, Delhi 2001</p> <p>Francis Cherunilam, Global Economy and Business Environment . Himalaya Publishing House, Delhi 2001</p>

<b>ABM-621</b>	<b>Export-import and Logistics Management</b>
Objective	To provide an overall perspective on the international business environment and economic relations, developing an understanding towards export procedures and documentation, logistics and finance.
Unit-1	Understanding Export-import environment – export policy resolution 1970, Exim 2002-2007, highlights of the current Exim Policy, Advance license, special impest license, export obligation, transferability of advance license, acceptance of bond/legal Undertaking, export promotion capital goods scheme, export and trading houses, international commercial terms 2000
Unit-2	Financing of Exports – International Terms of Payments, letter of credit, export finance-preshipment and post-shipment finance, Export credit and guarantee corporation, foreign exchange management act (FEMA) – basic concepts, regulation and management of foreign exchange, authorized persons, contravention and penalties, adjudication and appeal, foreign investment
Unit-3	Convertibility of rupee, liberalization and its impact –rationale, objectives, various forays, foreign investment in Information and technology sector and internet service providing sector, monetary and credit policy, global recession and its implication, symptoms and causes of recession, foreign exchange market- concept and profit for bank in forex transaction, role of clearing agent, foreign exchange risk management and type of exposure.
Unit-4	Export procedures and documentation – procedure for customs clearance of exported goods, shipment of cargo and clearance, export by air of post parcel, cargo insurance, export documentation, steps involved in exports documentation, clearing and forwarding agents for export, post export procedures like availing different export incentives
Unit-5	Import procedures and documentation - – procedure for customs clearance of imported goods, shipment of cargo and clearance, clearing and forewarning agents for import, essential knowledge for import, policy and procedures, institutional infrastructure for imports, central advisory council of India, Zonal export and import advisory committees, preliminaries for starting import business, exchange rate, forward exchange, evidence of import, International tenders, project import regulation
Unit-6	Logistic management – distribution channels – direct and indirect selling channels, international marketing logistics, international marketing logistics – concept, importance and need etc. , International transport modes, growing divergence in transport, world shipping terms- unitised container, break bulk shipment, chartering, Indian shipping – an overview, history, present status, required changes, competitiveness and contribution to Indian economy.

	<b>References</b>
	Export import and logistics management by Usha Kiran Rai Export import documentation and procedures by Senthilvelmurugan and mahalakshmi Export Import Management by Justin Paul and Rajiv Aserkar Exim Management by S Soundaran Export Import Procedures by C Rama Gopal

<b>ABM-622</b>	<b>Dynamics of Rural Development</b>
Objective	This course focuses on elements of rural development & rural economy, development theories, determinant of rural development, strategies and policies for rural development
Unit 1	Introduction – Concept, basic element of rural development, growth vs development, raising expectations and development, development and change, dilemmas in development, Rural economy of India- size & structure, characteristics of the rural sector, role of the Non/Agricultural subsector,
Unit 2	Measures of development, measures of income distribution, measures of development simplified, concepts and measures of rural poverty, paradigms of rural development – the modernization theory, dependency theory of the marxist school, Rosenstein-rodan's theory of the 'Big Push', leibenstein's 'critical minimum effort thesis', Lewis' Model of economic development, Gunnar Myrdal's thesis of 'Spread and Backwash' effects, The Human Capital Model of Development, The Gandian Model of rural development, other development theories etc.
Unit 3	Determinants of rural development – changes in output, natural resources, human resources, capital, technology, organizational and institutional framework, Rural development policies- freedom, control and public policy, need, goals of rural development, Hierarchy of policy goals, globalization and rural developments,
Unit 4	Strategies for sustainable development – concept, indicators of non-sustainable development, review of indian's strategies of rural development, Policy instruments of rural development- conceptual framework, action system, policy instruments, equity oriented and growth oriented programmes, poverty and unemployment eradication programmes, social welfare oriented programme, natural resources and infrastructure development programmes
Unit 5	Planning for rural developments – levels and functions of planning, decentralization of planning, methodology of micro level planning, Organising for rural development – organizational models, government organizations, Panchayati Raj Institutions (PRIs), Cooperatives, Non governments' organizations, Corporations and rural development, rural financing developments & sources. Implementation, monitoring and evaluation of projects
Unit 6	Public Policy and collectives & their governance – Individual rationality and collective irrationality – tragedy of commons, collective action and cooperation, different forms of collective organizations, self help groups, neighbourhood groups, community based organization, cooperative institutions, producers' organization and social movement



	<b>References</b>
	Rural Development – Principles, policies and management by Katar Singh, Sage Publication Dynamics of Rural Development Vol. 1 &2, Edited by Debendra K Das, Deep & Deep Publication

<b>ABM-623</b>	<b>Advanced Business Ethics</b>
Objective	This course covers the concept of ethics, business environment analysis, global issues related to ethics, business leadership, strategies for CSR
Unit 1	Introduction – future research and development, ethics and related concepts, importance, principles, standard issues in business, conduct of business, Methodology of business ethics, guidelines, approaches to morale reasoning, approaches of morale, morale issues in business, promote morale
Unit 2	Environmental analysis – process of environmental analysis in formulation of strategies, ethics and environment, dimensions of pollution and resource depletion, Idea of social contract – history, terms, benefit of the social contract, drawback for consumers and employees, domain of politics political system and function, scope, features, role of political parties, Social responsibility – principles, characteristics, assumptions & myth of social responsibility, CSR & ethics.
Unit 3	Global competitiveness, changing corporate, rapid export competitiveness, role of EDI in building export competitiveness, Marketing and globalization issue – traditional vs modern view, marketing concepts, implementation and functions of marketing, globalization and MNCs, political economy of globalization & its promises,
Unit 4	Ethical Leadership in Business – characteristics of leadership, qualities – outline of traitist theory, psychologists enumeration and leadership moments, Decision making – short and long term decisions, role, classification of decisions, decision making and authority, limitation of individual authority and group decisions, decision and operation research
Unit 5	Strategic planning and operational planning, planning system, limitation of strategic planning, reason for inadequate planning in India, steps for effective strategic planning, market economy in business ethics related CSR & corporate philosophy, advertising issues, corporate code of ethics, corruption
	<b>References</b>
	Business ethics, JC Vora, SBS Publisher Business ethics & environment, S Sharma, Maxford publication, New Delhi

<b>ABM-624</b>	<b>Econometric for Agribusiness Management</b>
Objective	To help students develop deeper understanding of economic statistics, econometrics, and have greater confidence in its application. Students will learn model construction and estimation, with applications in consumer and producer theory which will help them understand practical implications of Economics
Unit -1	Introduction to Econometrics - Brief introduction to course: What is econometrics? Why study econometrics? What is an econometric model? Types of Econometrics, Review of Statistical concepts, Sources and types of data, Methodology of Econometrics, Designing problem and defining objectives, Hypothesis formulation, Obtaining data, Choice of Method for fitting the data, Fitting of Model, Model criticism and selection, Simple Linear Regression
Unit – 2	Single Equation Regression Models - The Nature of Regression Analysis, The

	econometric model, The least squares principle, Estimating the econometric model and interpreting the results, The properties of the least squares estimates of an econometric model, Inference and prediction in the Simple Linear Regression Model, Interval estimation and hypothesis testing, Evaluating the Simple Linear Regression Model, The econometric model with more than one independent variable, Estimating the multiple regression and interpreting the results, Dummy variable Regression Models, Exercises
Unit-3	Problems of Econometrics - Multicollinearity, Heteroscedasticity, and Autocorrelation: Nature, Estimation, Consequences, Detection and Remedial Measures, Exercises
Unit-4	Various types of Models - Non Linear Regression Models- Estimation and Approaches, Logit and Probit Model, Panel Data Regression Models, Autoregressive and Distributed Lag Models
Unit-5	Time Series Analysis -Key concepts, Stochastic Processes, Unit Root Stochastic Process, Trend Stationary and Difference Stationary Stochastic Processes, Spurious Regression, The Unit Root tests, Transforming non stationary time series, Cointegration, Approaches to Economic Forecasting, AR, MA and ARIMA Modelinf of Time Series Data, The Box Jenkins (BJ) Methodology, Vector Autoregressive (VAR), ARCH and GARCH models, Some Managerial Economics applications
	<b>References</b>
	Damodar Gujarati, Dawn Porter, and Sangeeta Gunasekar, <i>Basic Econometrics</i> , 5 <sup>th</sup> Edition. McGraw-Hill. Woolridge, Jeffrey. 2013. <i>Introductory Econometrics: A Modern Approach</i> , 5 <sup>th</sup> edition. Cengage Learning. Maddala, George S., <i>Introduction to Econometrics</i> , Prentice Hall. Any edition. Stock, James H. and Mark Watson. <i>Introduction to Econometrics</i> , 2 <sup>nd</sup> Edition. Pearson, Addison Wesley. 2007

<b>ABM-625</b>	<b>Agribusiness and Climate Change</b>
Objective	This is designed to understand the challenges of climate change to agribusiness enterprise and to train learners to think and design possible solution to the underlying problem
Unit-1	Weather, climate and climate change - Introduction, difference between weather and climate, drivers of climate change, contributing sectors, Anthropogenic activities including Agriculture and contribution to climate change, current and future scenario, Role of IPCC, Convention and treaties, Global initiatives to fight climate change, India's stand
Unit-2	Contribution of Agribusiness to climate change and mitigation strategies -Input acquisition cost: Manufacture of fertilizers, transport and handling of inputs, Soil, Land and Water Management: soil tillage operations, soil erosion issues, soil fertility issues.Crop/ Livestock husbandry, Pests and disease control, marketing and value addition/ processing. Mitigation strategies for input acquisition, soil, land and water management, crop/ livestock husbandry, Pests and disease control, marketing and value addition/ processing
Unit-3	Impact of climate change on Agribusiness - Increased cost of transportation/ handling, reduced quality of inputs, enhanced soil erosion, reduced nutrient use efficiency, reduced machinery efficiency, increased irrigation cost, destruction of farm infrastructure, total enterprise failure, reduced quality and yield, increased cost to control/ manage stressors, higher and new incidences of diseases and pests, Increased cost of processing, handling, packaging and

	transportation, Reduced quality of product/produce, shorter shelf life of the produce/product, Competition from cheap alternative products/produce, Market gluts (risks of low prices)
Unit-4	Challenges to Agribusiness in a changing climate, Opportunities for Agribusiness in Adaptation and Mitigation to Climate Change - Pre production, production, pre and post harvest, transportation, processing, marketing sales and consumption, Use of Renewable energy, Tillage and planting, Water management: Greenhouse, hydroponics, Micro Irrigation Systems, post harvest management, crop insurance, Finance and business advisory, enabling ecosystems, access to information
Unit-5	Climate change adaptation strategies of Agribusiness enterprise - Climate smart agriculture, Input acquisition: proper enterprise choice, seasonal planning, proper farm storage, soil health card, good agricultural practices, good animal husbandry practices, marketing and value addition/ processing: farm record analysis, market intelligence and surveys, product diversification, contract farming, Keeping the costs of processing, handling, packaging and transportation low, keeping low production and marketing costs, index based weather insurance
	<b>References</b>
	Handbook on Climate Change and Agriculture, by Diner, Ariel and Mendelsohn, Robert, Edward Elgar Publisher Climate Change and Agriculture in India: Studies from Selected River Basins, by K. Palanisami , C. R. Ranganathan , Udaya Sekhar Nagothu , Krishna Reddy Kakumanu, Routledge India