DEPARTMENT OF AGRICULTURAL MARKETING, COOPERATION AND BUSINESS MANAGEMENT UAS, GKVK, BANGALORE MASTER OF BUSINESS ADMINISTRATION (AGRI – BUSINESS

MANAGEMENT)SYLLABUS

Course No.	Title	Credits
ABM 501	Principles of Management and Organizational Behaviour	2+0
ABM 502	Agribusiness Environment and Policy	2+0
ABM 503	Managerial Economics	1 + 1
ABM 504	Managerial Accounting and Control	1+1
ABM 505	Communication for Management and Business	2+0
ABM 506	Business Laws and Ethics	2+0
ABM 507	Marketing Management	2+0
ABM 508	Human Resource Management	2+0
ABM 509	Financial Management	1+1
ABM 510	Production and OperationsManagement	1+1
ABM 511	Research Methodology in Business Management	1+1
ABM 512	Project Management and Entrepreneurship Development	1+1
ABM 513	Agricultural Banking and Management	2+0
ABM 514	International trade and Policy	2+0
ABM 515	Operations Research	1 +1
ABM 516	Computers for Managers	1+1
ABM 517	Management Information System	1+1
ABM 518	Food Technology and Processing Management	1+1
ABM 519	Fertilizer Technologies and Management	1+1
ABM 520	Management of Agro Chemical Industry	1+1
ABM 521	Farm Business Management	1+1
ABM 522	Seed Production Technology and Management	1+1
ABM 523	Technology Management for Livestock Products	1+1
ABM 524	Post-Harvest Management of Horticultural Crops	1+1
ABM 525	Farm Power & Machinery Management	1+1
ABM 526	Risk Management	1+1
ABM 527	Management of Agribusiness Cooperatives	2+0
ABM528	Agribusiness Financial Management	1+1
ABM 529	Food Retail Management	1+1
ABM 530	Management of Agricultural Input Marketing	2+0
ABM 531	Commodity Marketing and Futures Trading	1+1
ABM 532	Agri Supply Chain Management	1+1
ABM 533	Business Mathematics	1+1
ABM 534	Livestock and Poultry Management	1+1
ABM 535	Management of Floriculture and Landscaping	1+1
ABM 536	Rural Marketing	2+0
ABM 537	Agricultural Marketing Management	2+0
ABM 538	Application of e-commerce in Agri-business	2+0
ABM 561	Institutional Placement	0+2

ABM 571	Qualifying Examination	0+2
ABM 581	Seminar	0+2
ABM 591	Project work	0+10

ABM 501 Principles of Management and Organizational Behaviour (2+0)

Theory

Introduction to Management and Organizations-Nature, scope and significance of management-Management Functions-Roles-Skills.

Evolution of Management Thinking- Classical Management Theory- Behavioral Science Approach-Management Science Perspective- Recent Trends in Management Theories.Managerial Planning-Overview of Goals and Plans-Steps in Planning Process-Types of Plans-Strategic Management. Managerial Decision-Making- Meaning- Types of Decisions- Decision Making Models- Decision Making Steps-Decision Making Styles- Behavioral aspects of Decision Making in Organizations. Organizational Structure and Design- Basic elements of organizing- Grouping of jobs-Departmentalization-Distributing Authority-Delegation process-Differentiating between positions-Managing Organizational Designs -Managing organizational Change and Innovation-Steps in change process-Types of Change -Areas of organizational change -Organizational Innovation. Motivating Employees- Early Theories of Motivation-Contemporary Theories of Motivation-current issues in motivation. Leadership-Nature of leadership-Leadership Theories-Trait Theories-Behavioral Theories-Situational approaches to leadership-Path-Goal theory-contemporary views of leadership- Transformational and Transactional Leadership-Leadership issues in 21st century. Managerial Communication –Nature and functions of communication-Communication process - Forms of communication in organizations- Managerial control- the control process.

Organizational Behaviour-the organizational context-Environment – Technology-understanding Individual behavior in the organization-Learning-Personality-Perception-Groups and teams in the organization- Group formation-Group structure. Individuals in groups-Team working. Organization development-Organization culture.

ABM 502 Agribusiness Environment and Policy (2+0)

Theory

Agribusiness - Meaning, Scope of Agribusiness, Emergence of Agribusiness, Importance of Agribusiness. Problems and policy changes relating to farm supplies, farm production, types and stages of agro processing, management, planning, leading and controlling. Agribusiness sub systems - Linkages among sub-sectors of the Agribusiness sector; economic reforms and Indian agriculture; impact liberalization, privatization and globalization on Agribusiness sector. Emerging trends in production, processing, marketing and exports; Integrated Agribusiness Development Policy 2011 and Karnataka Agribusiness & Food Processing Policy 2015. Agricultural price and marketing policies; Entrepreneurship in Agribusiness, Business organizations in Agribusiness, Agribusiness tools- Break even analysis, Linear programming, SWOT analysis, Cost of wrong decisions in using inputs, factor share, e-agribusiness, six sigma- essentials, roles required for implementation and advantages of Six sigma.

Definition, scope and significance of managerial economics, Basic economic concepts & principles - Firm, industry and economy, Marginal analysis: Utility function - Equi-marginal principle, Consumer's surplus, Opportunity cost. Demand analysis - Meaning and types of demand, demand curve – law of demand - demand function – Uses of demand analysis. Elasticity of demand – types, factors determining elasticity, Measurement of elasticity - Point and arc elasticity's - Managerial uses of elasticity – Elasticity of demand and marginal revenue. Demand estimation – meaning, steps and uses. Demand forecasting - meaning, importance and techniques, Non-quantitative and quantitative techniques. Demand forecasting - Trend method, regression method, leading indicator method, simultaneous equations method. Production analysis - production function with one variable input & two variable inputs (returns to a factor and returns to scale, elasticity of output. Isoquants, least-cost combination of inputs, Expansion path, Elasticity of substitution, Cobb-Douglas & CES production functions. Production possibility analysis: Product-product relationships - Product transformation curve, Iso-revenue curve, optimal product combination. Cost analysis -Various Cost concepts, short-run and long-run cost curves, Derivation of cost functions from production functions, Economies and diseconomies of scale, Economies of scope, Changing objectives of modern firms & their cost curves, Learning curve, Meaning, uses and types of cost control, Revenue concepts, Break-even analysis. Markets & Pricing - Determination of market price, Market price & normal price. Market structure, Characteristics of and price determination in perfect competition. Monopoly – Types, characteristics, price and output determination, Types & degrees of price discrimination under monopoly. Monopolistic competition - Types, characteristics, and pricing and output determination, Pricing strategies of modern firms. Macro-economic environment - Circular flow of income, Concepts and measurement of GNP, consumption, investment and savings. Macro-economic equilibrium. Money: Concept and functions - demand for and supply of money. Inflation - Meaning and types - Price indices - Causes, effects and control of Business cycles – Monetary and fiscal policies.

Practical

Quick look at algebraic equations and functions & their uses in managerial economics, calculation of utility function. Computation of different types of demand function. Computation of elasticity of demand (price, income, cross and promotional) Computation of total, average and marginal revenue under different market conditions. Demand estimation through regression analysis. Analysis of important demand forecasting methods. Computation of average product, marginal product and elasticity of output with respect to one variable input. Analysis of optimal factor combination using C-D production function. Computation of elasticity of substitution using C-D & CES production functions. Calculation of optimal output combination of multi-product firms. Derivation of cost functions from production functions. Computation break-even point, learning curve and economies of scope. Calculation of equilibrium price and output under conditions of perfect competition. Calculation of the degree of market power and of equilibrium price and output under conditions of monopoly and oligopoly. Calculation of market concentration under oligopoly. Computation of macro-economic equilibrium models. Presentation of case studies by students.

Financial Accounting- Meaning, Need, Concepts and Conventions; Branches of Accounting, Internal and External Users of Accounting, Advantages and Limitations of Financial Accounting, Accounting Standards. The Double Entry System- Its Meaning and Scope, The Journal, Cash Book, Ledger, Trial Balance, Trading Account, Profit and Loss Account, Balance Sheet, Entries and Adjustments of different heads in different Books and Accounts. Introduction of Company Accounts. Managerial Accounting- Meaning, Functions, Scope, Utility, Limitations and Tools of Management Accounting, Analysis of Financial Statements- Ratios, Comparative and Common Size Statements, Cash Flow and Funds Flow Analysis. Cost Accounting - Nature, Objectives and Significance of Cost Accounting; Classification of Cost, Costing for Material, Labour, and Overheads; 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. Responsibility Accounting- Its Meaning and Significance. Budget and Budgetary Control- Its Meaning, Uses and Limitations, Budgeting and Profit Planning, Different Types of Budgets and their Preparations, Sales Budget, Purchase Budget, Production Budget, Cash Budget, Flexible Budget, Master Budget, Zero Based Budgeting.

Practical

Preparation of Journals-Ledgers- Trial balance. Preparation of different types of cash books. Preparation of Final Accounts- Manufacturing A/c, Trading A/c, Profit & Loss A/c and Balance Sheet.

ABM 505 Communication for Management and Business (2+0)

Theory

Introduction to communication, Communication process, Barriers to Communication, Effective Communication, types of communication in organizations viz. Downward, Upward, Horizontal, Static Vs dynamic. Non-Verbal Communication, Communication through clothes/ colours / space/ symbol, Body language and etiquettes, Interpersonal Communication, Self-concept and communication, Assertive Communication. Types of business writing viz, Newsletters, Reports, Folders, Fact Sheets, Press release; Readership and writing style - human aspects of writing. Meetings - Planning for meeting, tips for chairing, opening, progress & ending, Behavior of ordinary members, the character of business meeting, Energies for meetings, Group discussions, brain storming sessions and presentations. Handling personal communication - Letters, dictation, reading, problem solving, listening skills, self-talk, self- reflection, steps to personality development, public speaking. Practical sessions for spoken English.

ABM 506 Business Laws and Ethics (2+0)

Theory

Introduction to Indian legal system, The Indian Contract Act- 1872: Contract- meaning, nature, significance, types of contract, essentials of a valid contract, offer and acceptance, capacity to contract, free consent, performance of contract. Companies Act- 1956: incorporation, commencement of business, types of companies, management, winding of companies, Negotiable Instruments Act. Essential Commodities Act, APM C Act, Consumer Protection Act, RTI Act, The Competition Act, 2002- major provisions and implications. Factory Act, Labour laws, Industrial dispute Act. Nature and importance of ethics and moral standards; corporations and social

responsibilities, scope and purpose of business ethics; Ethics in business functional areas; industrial espionage; solving ethical problems; governance mechanism.

ABM 507 Marketing Management (2+0)

Theory

The Concept of Marketing Management; Marketing Environment; Marketing Mix, Strategic Marketing, Market Segmentation, Targeting and Positioning; Buyer Behavior, Marketing Information System, Marketing Organization and Control. Marketing potential and forecasting, Classification of Products; Product Life Cycle; New Product Development; Product Line and Product Mix; Branding, Packaging and labeling. Factors affecting prices; Pricing Policies and Strategies; Pricing Methods. Types of Distribution Channels; Functions of Channel Members; Channel Management Decisions. Promotion Mix; Introduction to Advertising, Personal Selling, Sales Promotion, Publicity and Public Relations, Direct marketing, managing integrated marketing promotion. Customer Relationship Management. Case studies discussion and presentation. Industrial visits relating to agribusiness firms.

ABM 508 Human Resource Management (2+0)

Theory

Introduction to Human Resources Management; Human Resource Planning- Nature and Significance, Job Analysis, Job Description, job Specification, Job enlargement, Job enrichment, Job rotation, Job evaluation. Employ discipline, Recruitment and Selection Process, Induction, Training and Human Resource Development-Nature, Significance, Process and Techniques, Internal mobility including Transfers, Promotions and employee welfare. Performance Appraisal - Significance and methods, Compensation management, Wage and Salary Administration - Course Objective; Wage Fixation; Fringe Benefits, Incentive Payment, bonus, and Profit Sharing. Worker's Participation in Management, Career planning arid employee retention. Quality of work life, employee welfare measure, Disputes and grievance Health and Safety of Human Resources; Human Resources accounting, Human Resources outsourcing.

ABM 509 Financial Management (1+1)

Theory

Financial Management – Meaningand Objectives, Scope andFunctions of Financial Management, Financial Planning and Forecasting. Capitalization – Under and Over Capitalization, Capital Structure – Computation of cost of capital, Trading on Equity, Leverages – Type and Significance. Capital Budgeting – Nature and Significance, Time value of money- Discounting and Compounding – Methods of evaluating Capital Expenditure proposals. Financial statements of Corporate Organizations – As per the Companies Act of 2013. Analysis and interpretation of Financial Statements: Techniques of Ratio Analysis and Cash Flow Statement as per Accounting Standard 3 issued by the Institute of Chartered Accountants of India. Working Capital Management – Nature of Working Capital Management, Need for working capital – Estimation of Working Capital requirement – Management of Cash and Receivables, Cash Budget. Management of Profits-Dividend Policy, Procedural and Legal formalities involved in the payment of dividend-Bonus Shares.

Practical

Working out problems- preparation of fund flow and cash flow statements-preparation of capital

structure models and application and analysis of case studies. Presentation of case studies in class rooms, Problems on Capital budgeting techniques, Problems on corporate finance, preparation and analysis of Balance sheet and income statement.

Theory

Nature and Scope of Production and Operations Management; Its relationship with Other Systems in the Organization; Factors Affecting System and Concept of Production and Operation Management; Facility location, 'Types of Manufacturing Systems and Layouts, Layout Planning and Analysis. Productivity Variables and Productivity Measurement, Production Planning and Control, Mass Production, Batch Production, Job Order Manufacturing, Product Selection, Product Design and Development, Process Selection, Capacity planning. Scheduling, Maintenance Management Concepts, Work Study, Method Study, Work Measurement, Work Sampling, Work Environment, Industrial Safety, An Overview of Material Management, Determination of Material Requirement, Purchase Management, Store Management, Logistics management, Material Planning arid Inventory management, Safety Management. Quality Assurance, Accepting Sampling, Statistical Process Control, Total Quality Management, ISO standards and their Importance, Introduction to re-engineering, value engineering.

Practical

Solving production and operation oriented problems

Theory

Meaning, Course Objective, types, and process of research; research methodology in management-exploratory, descriptive, experimental, diagnostic, Problem formulation, setting of Course Objective, formulation of hypotheses. Scales of measurement - nominal, ordinal, interval, ratio, Likert scale and other scales; Primary and secondary data, sources of data, instruments of data collection, data editing, classification, coding, validation, tabulation, presentation, analysis. Concept of Sampling, Probability and non- probability sampling techniques including Simple Random Sampling, Stratified Sampling, Multi-stage Sampling, Systematic Sampling, Purposive Sampling, Quota sampling, judgment sampling, and convenience sampling, sample size determination, sampling and non- sampling errors. Role and uses of quantitative techniques in business decision making, Use of Equations, Use of Determinants and Matrices in business decisions, Revision about descriptive statistics, Introduction to Probability, Binomial, Poisson and Normal distributions, Simple, partial, and multiple correlation, rank correlation, simple and multiple regression, Discriminant and dummy variable analysis. Hypothesis testing, application of t - test, chi-square and F tests. ANOVA, Factor- analysis, cluster analysis, conjoint analysis, multi-dimensional analysis etc, Report writing: Types of report, essentials and contents of good report writing.

Practical

Problems on tests of significance, Non-parametric tests, fitting of simple and multiple linear regressions. One way and two way analysis of variance. All practical will be done using statistical Softwares. Fitting MLR models using OLS, Testing parameters, Tests pertaining to heteroscedasticity, Autocorrelation and Multicollinearity, Problems related to multivariate methods. All practical will be done using statistical softwares.

Concept, characteristics of projects, types of projects, project identification, and project's life cycle. Costs in projects, benefits of projects, project feasibility- market feasibility, technical feasibility, financial feasibility, and economic feasibility, social cost-benefit analysis, rationale for social cost-benefit analysis, project risk analysis. Network methods: meaning, network analysis, requirements for network analysis, Critical Path Method (CPM), Programme Evaluation and Review Technique (PERT), project scheduling and resource allocation. Pricing of costs and benefits, Financial appraisal/evaluation techniques- discounted/un-discounted cash flows; net present values, profitability index, internal rate of return; benefit cost ratio; accounting rate of return, payback period, project implementation; cost overrun, project control and information system. Entrepreneurship, significance of entrepreneurship in economic development, qualities of entrepreneurs, 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.

Practical

Planning projects, feasibility studies, use of monitoring and evaluation techniques, network analysis andreview of case studies.

ABM 513 Agricultural Banking and Management (2+0)

Theory

Banking and itsevolution – Types of banking services - Types of banks and banking systems - banking services – Classification of banks – RBI as regulator – Banking Regulation Act –RBI Act Types of relationship between banker and customers – Legal dimensions of such relationship – Deposits– Types – Rules applicable to operation, nomination and settlement of claims, Types of loan facilities – Types of creation of charge: Lien, Hypothecation, Pledge, Assignment, Mortgage – Fund based facilities – Non fund based facilitiesBank Guarantees and Letter of credit -Term loans and working capital facilities – Assessment of working capital – Problems – Credit Management – Various steps involved from application to closure - Types oflending – Types of borrowers – Legal aspects governing lending – Prudential norms- Loans to agriculture sector – Types of loans - Methods of lending - Non Performing Assets – Income recognition – Asset Classification – Provisioning norms

Export Finance – International Banking Services – Provisions of FEMA - NABARD – Functions – Schemes – Role- Lead Bank Scheme- District Credit Plan – Process and Implementation; Risk Management: Systems, mechanism – Types of risks in banking business; Asset Liability Management - ALM systems, mechanism

Co-operative Banking – Types, hierarchy and regulatory framework; Project Financing – Ratio Analysis

Recovery of Loans: Various recovery forums: Legal forums, Adalats, Debt Recovery Tribunals – Settlement proposals.

International trade - basic concepts, theories and importance to Indian Agriculture, WTO and its implications for Indian economy in general and agriculture sector in particular. TRIPS, TRIMS quotas, anti-dumping duties, quantitative and qualitative restrictions, tariff and non-tariff measures, trade liberalization, economic integration subsidies, green and red boxes, issues for negotiations in future in WTO; CDMs and carbon trade. Composition of India's foreign trade policy; India's balance of payments. International Monetary arrangements. Exchange rate; exchange rate volatility and international trade, export procedures &documentations, certifications for Exports in agricultural products; Key challenges of international trade in Agriculture.

ABM 515

Operations Research

(1+1)

Theory

Operations Research –Characteristics, scope, phases, methodology and limitations. 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, Economic Order Quantity (EOQ) Model, Continuous Review (Q) System, Periodic Review (P) System, Hybrid System, Simulation. Waiting Line Models:Waiting Line Problem, Characteristics of a Waiting- Line System, Single-Channel Model, Multiple-Channel Model, Constant- Service Time Model, Finite Population Model, Sequencing and Replacement models. Decision making under Risk and uncertainties, Decision problem, Maximax Criterion, Maximin Criterion,Minimax Regret Criterion, Laplace Criterion, Payoff Tables, Decision Trees, Expected Value of perfect Information. Game Theory - Two -Person Zero-Sum Game, Simulation, Network analysis - PERT & CPM.

Practical

Formulation and solving of linear programming problems, transportation problem - application to business problems. Integer programming, Goal programming and dynamic programming - formulation and solving business related problems. Application of operations research to Agribusiness problems. All practical will be done using statistical software.

ABM 516

Computers for Managers

(1+1)

Theory

Introduction to Computer: What is a Computer, Characteristics of Computer, History of Computer Generations of Computer, Classification of Computers Computer System, Input-Process-Output Concept Components of Computer Hardware, Application of Computers.

Computer System Hardware: Computer Hardware Central Processing Unit – ALU, Registers, CU, Memory Unit – Cache, Primary, Secondary Memory, Instruction Format

Instruction Set, Instruction Cycle, Microprocessor Bus – System Bus, Expansion Bus, External Ports, Performance of computer, Inside a computer cabinet.

Memory and Storage devices: Memory Representation, Categories of Memory, Memory Hierarchy, Registers, Cache Memory, Primary Memory – RAM, ROM, Secondary Memory, Magnetic Tapes, Magnetic Disk, Floppy Disk, Hard disk, Zip disk, Optical disk, CD-ROM, DVD-ROM, Recordable optical disk, Using computer memory.

Interaction of User and Computer: Types of Software, System Software-Operating System, Device

Driver, System Utilities, Programming Languages- Machine Language, Assembly Language, High-Level Language, Different generations of Programming Languages, Translator Software-Assembler, Compiler, Interpreter, Linker & Loader, Application Software.

Computer Programming Fundamentals: Program, Program Development Process, Algorithm, Control Structures, Flowchart: Symbols, Preparing a Flowchart, Control Structures in Flowchart, Pseudo code: Preparing Pseudo code, Control Structures for Pseudo code, Programming Paradigm: Structured Programming, OO P, AOP, Characteristics of a good program.

Data Communication and Computer Network: Importance of Networking, Data Transmission Media: Twisted pair, Coaxial cable, optical fiber, Radio Transmission, Microwave Transmission, Satellite Transmission, Data Transmission across Media: Modes, Speed, Fundamentals of Transmission: Signals, Modulation, Multiplexing, Data Transmission and Networking: Switching, Computer Network: Network types,LAN Topology, Communication Protocol, Network Devices: NIC, Repeater, Bridge, Hub, Switch, Router, Gateway, Wireless Networking: Bluetooth, Wireless LAN & WAN.

Internet and Internet Services: Internet and its History, Internetworking Protocol, Internet Architecture, Managing the Internet, Connecting to Internet, Types of Internet Connections, Internet Address, Internet Services: WWW, e-mail, FTP, Uses of Internet.

Information Systems: Data, Information, Knowledge, Characteristics of Information, What is a System, Information System (IS) - Components, Characteristics, Computer-Based Information Systems, Need for Efficient IS, Categories of IS, Operation Support System: TPS, OAS, Management Support System: MIS, DSS, EIS, Specialized System: Expert system, ERP, Ecommerce, Careers in IS.

Fundamentals of Database: Database, File-oriented approach, Database approach, Data models, Conceptual (entity, relationship, cardinality, E-R model), Representation (Relational, Hierarchical, Network), Physical, Database system: users, software, hardware, data, ANSI/SPARC architecture of database system, DBMS: DDL, DML, DBA, Database system architecture, Centralized, Client-Server, Distributed, Database applications.

Practical

MS-Word 2007: Word processing software, MS-Word – Start, Screen, Office Button., Ribbon, Sample exercises. MS-Excel 2007: Spreadsheet software – Basics, MS-Excel – Start, Screen, Office Button, Ribbon, Sample exercises. MS-PowerPoint 2007: Presentation software – Basics, Terminology, MS-PowerPoint – Start, Screen, Office Button, Ribbon, Sample exercises.

ABM 517 Management Information System (1+1)

Theory

The concept of MIS - Definition, importance, Course Objective, prerequisites, advantages and challenges; Information Needs of organization, MIS and Decision - Making. Types/ Classification of Information System for organizations - Office Automation Systems, Transaction Processing Systems, Decision Support System, Executive Support System, Knowledge Based Expert System. Applications of MIS in the areas of Human Resource Management, Financial Management, Production/ Operations Management, Materials Management, Marketing Management. Information Technology- concept, applications; advantages and prerequisites, Choice of Information Technology, Social and Legal Dimension of IT, Strategic MIS, ERP and E Commerce applications, Information security Management

Practical

Solving business oriented problems on the topics covered above.

ABM 518 Food Technology and Processing Management (1+1)

Theory

Present status of food industry in India; Organization in food industry; Introduction to operations of food industry; Deteriorative factors- and hazards during processing, storage, handling and distribution. Basic principles of food processing and food preservation by manipulation of parameters and factors and application of energy, radiations, chemicals and biotechnological agents; Packaging of foods. Analysis of costs in food organization; Risk management; Laws and regulations related to food industry and food production and marketing; Quality management - quality standards, PFA, ISO, etc. Case studies on project formulation in various types of food industries - milk and dairy products, cereal milling, oil-seed and pulse milling, sugarcane milling, honey production, baking, confectionery, oil and fat processing, fruits and vegetable storage and handling, processing of fruits and vegetables, egg, poultry, fish and meat handling and processing, etc.

Practical

Field visits to Food processing companies, milk and dairy processing units, Rice mills .oil-seed and pulse milling, sugarcane' factories etc.

ABM 519 Fertilizer Technologies and Management (1+1)

Theory

Fertilizer development - concept, scope, need, resource availability; import and export avenues for fertilizer; types of fertilizers, grading and chemical constituents, role of fertilizers in agricultural production, production and consumption of fertilizer in India. Raw material needed and principles of manufacturing of nitrogenous, phosphatic and potassic fertilizers, secondary nutrient sources and micronutrient formulations. Straight fertilizers, liquid fertilizers, water fertilizers, complex fertilizers, slow release fertilizers. Production efficiency and capacity utilization; quality control and legal aspects- fertilizer control order. Testing facilities; constraints in fertilizer use and emerging scenario of fertilizer use; assessment of demand and supply of different fertilizers, fertilizer distribution, and fertilizer storage. Field trials and demonstration, fertilizer pricing policy; scope of biofertilizer; environmental pollution due to fertilizer use.

Practical

Field visits to Fertilizer manufacturing company, dealers, and retailers.

ABM 520 Management of Agro Chemical Industry (1+1)

Theory

Agro-chemicals: Definition and classification; Basic knowledge of agrochemicals; role and status of agro-chemical industry in India; Pesticides - Classification and Introduction, knowledge of different pesticides. Role and status, management, functioning of the agrochemical industry. Insecticides - Definition and classification based on (a) Mode of Entry (b) Mode of Action and (c) Chemical Structure with example; Insecticidal formulation; preliminary knowledge of mode of action of insecticides; knowledge of plant protection equipment's. Fungicides - Classification and preliminary knowledge of commonly used fungicides; Bio-magnifications of pesticides and pesticidal pollution. Introductory knowledge about development of agro-chemicals; Insecticidal

poisoning, symptoms and treatment; Main features of Insecticide Act. Directorate of Plant Protection, Quarantine and Storage - A brief account of its organizational set up and functions; IPM Concept - Bio-pesticides - Plant products. Fertilizer scenario in India - Definition of fertilizers, classification and examples. Manufacture of major nutrient fertilizers- secondary nutrients, micro nutrients, fertilizer mixtures, granulated fertilizers and uses of fertilizers. Soil amendments-agricultural lime and others- characteristics and uses, bio-fertilizers, plant hormones and tonics

Practical

Field visits to Agro-chemical industries, dealers, and retailers.

ABM 521 Farm Business Management (1+1)

Theory

Nature, scope, characteristics and role of farm business management; farm management decisions; farm management problems. Resources- concept, types, cost functions and relationship between economic optima and physical optima. Application of simultaneous equations in farm business. Principles of farm management decisions - principle of variable proportion, cost principle, principle of factor substitution, law of equi-marginal returns, opportunity cost principle, etc. use of various functions used in farm business, profit maximization under limited and unlimited use of revenue functions in farm business. Tools of farm management and farm business analysis - farm planning and budgeting; Farm records and accounts, types and problems in farm records and accounts, net worth statement, farm efficiency measures. Linear programming, break even analysis in farm business activities, decomposition analysis, productivity differential model, factor share. Management of farm resources - Land, Labour, Farm machinery, Farm building, etc. modeling of farm layout, fencing, improving the efficiency of labour. Risk and uncertainty in farming -sources of uncertainty in farming, management strategy to counteract uncertainty and decision making process in *farm* business management under risks and uncertainty. Cost of wrong decisions in input use-profit and production concept.

Practical

Empirical estimation of production functions, Profit function, Frontier Production function, optimum combination of enterprises, Independent, joint, supplementary, complimentary and competitive, factor share analysis, derivation of output demand and factor supply functions, review of literature on applications and limitations of production functions/models.

ABM 522 Seed Production Technology and Management (1+1)

Theory

Seed Technology - Role of Seed Technology, its Course Objective and goal, Seed Industry in India, National Seed Corporation - Tarai Seed Development Corporation, State Seed Corporations, National Seed Project and State Farms and their role. Development and Management of Seed Programmes - Seed Village Concept, Basic Strategy of Seed Production and Planning and Organization of Seed Programme; Types of Seed Programme - Nucleus seed, Breeders seed, Foundation seed and Certified seed etc. Maintenance of genetic purity - Minimum seed certification standard and Management of breeders & Nucleus seed; Management of seed testing laboratory and research and development. Management of seed processing plant, seed storage management; seed packaging and handling. Seed Marketing; GM Crop seed, IPR, PBR, Patents and related issues and their impact on developing countries; Statutory intervention in the seed industry; Seed legislation and seed law enforcement, Seed act; Orientation and visit to seed production farms, seed processing

Units, NSC, RSSC, RSSCA and seed testing laboratories.

Practical

Field visits to Seed production companies, agencies.

ABM 523 Technology Management for Livestock Products (1+1)

Theory

Present status of livestock products industry in India - dairy, meat, poultry, skin, hides, wool, etc; Dairy Products- Manufacturing technologies of various dairy products and by-product utilization. Meat and Poultry Products- Manufacturing technologies of meat and meat products, egg and poultry products; production, processing and utilization of wool and animal by-products. Plant Management- Production planning and control needs and techniques of production control, packaging, preservation and storage system for livestock products; transportation system for domestic markets and international markets. Quality control measures during storage and transit; extent of losses during storage and transport, management measures to minimize the loss. Marketing and distribution of animal products; quality standard for various products; environmental and legal issues involved.

Practical

Field visits to livestock production units-dairy, poultry and fishery units.

ABM 524 Post-Harvest Management of Horticultural Crops (1+1)

Theory

World production and horticulture in India; present status of fruit industry in India and emerging scenario. Management of horticultural crops - establishing an orchard, basic cultural practices, regulation of flowering, fruiting and thinning, protection against insect-pest, weeds: pre and post-harvest management for quality and shelf life. Post-harvest management in horticulture-procurement management, important factors for marketing, standardization and quality control, packaging. Post-harvest management in horticulture- development of fruit-based carbonated drinks, development of dehydrated products from some important fruits, storage of pulp in pouches, essential oils from fruit waste, dehydrated fruits. Market structure and export potential of fruits. Problems in marketing of fruits, and government policy; quality standards for domestic and international trade.

Practical

Field visits to fruits and vegetable processing units.

ABM 525 Farm Power & Machinery Management (1+1)

Theory

Various sources of farm power, their availability and utilization; Course Objective, importance and present status, level and the scope of farm mechanization. Tractor and power tillage industry - model, make, capacity, production, present status and future prospects; concept of zero tillage. Farm machinery selection for different size of farm size and for different agro-climatic conditions; scheduling of farm operations for higher efficiencies, indices of machine performance. Cost analysis of operations using different implements, economic performance of machines, and optimization of tractor implements system and transport of farm produce. Agricultural equipments industry - their production, marketing and constraints; establishment of agricultural engineering enterprises (agro service centers, etc.).

Practical

Field visits to farm machinery manufacturing companies, dealers and service providers.

ABM 526 Risk Management (1+1)

Theory

Risk and uncertainty in Agriculture, Types of risk and uncertainty, incorporation of risk and uncertainties in decision making, risk return. Trade off, Risk management strategies-evaluating risk situation, measures to reduce risk and uncertainty, overview of the basic principles of risk assessment and where it fits into the risk analysis process. Insurance - crop insurance, liability insurance, life insurance, health insurance and social insurance. Disaster Management, levels of disaster-input, crop loss, drought, flood, pests and diseases, labor, transportation, etc., Measures to counter disaster-contract farming, agricultural diversification.

Practical

Solving business oriented problems on the topics covered above.

ABM 527 Management of Agribusiness Cooperatives (2+0)

Theory

Cooperative administration- a global perspective, ecology of cooperative administration, cooperative sector and economic development. Cooperative management- nature, functions and purpose of cooperatives - procurement, storage, processing, marketing, process of cooperative formation, role of leadership in cooperative management. The state and cooperative movement, effects of cooperative law in management, long range planning for cooperative expansion, policy making. Human resource management, placement and role of board of directors in cooperative management. Overview of agribusiness cooperative - credit cooperatives, cooperative marketing, dairy cooperative; financing agribusiness cooperative.

ABM528 Agribusiness Financial Management (1+1)

Theory

Importance, need and scope of financial management; classification and credit need in changing agriculture scenario; finance functions, investment financing; balance sheet, income statement, cash flow statement for agribusiness. Financial planning and control- assessment of financial requirement of an agribusiness unit; leverage - concept of leverage, financial and operating leverage; factor affecting capital structure, features of an optimal capital structure. Working capital management - concept and components of working capital, need for working capital in agribusiness, management of cash and accounts receivables, and inventory for agribusiness. Capital budgeting - steps and concept of capital budgeting, appraisal criteria - payback period, average rate of return, net present value, benefit cost ratio and internal rate of return. Agri-business financing system in India - functioning of cooperative credit institutions, commercial banks, regional rural banks, NABARD, Agro- Industries Corporation, etc in agribusiness financing.

Practical

Working out problems- preparation of fund flow and cash flow statements-preparation of capital structure models and application and analysis of case studies. Presentation of case studies in class rooms, Problems on Capital budgeting techniques, Problems on corporate finance, preparation and analysis of Balance sheet and income statement.

Introduction to Food Retailing, Foreign Investment in Food Industry, Retail management and Food Retailing, The Nature of Change in Retailing, Organized Retailing in India, E-tailing and Understanding food preference of Indian Consumer, Food consumption and Expenditure pattern, Demographic and Psychographic factors affecting Food Pattern of Indian Consumer. Value Chain in Food Retailing, Principal trends in food wholesaling and retailing, food wholesaling, food retailing, the changing nature of food stores, various retailing formats, competition and pricing in food retailing, market implications of new retail developments. Application of these principles to small and family owned business and retail business. 4 P"s in Food Retail Management, Brand Management in Retailing, Merchandise pricing, Pricing Strategies used in conventional and nonconventional food retailing, Public distribution system, Retail mix for food retailing, Management of sales promotion and Publicity, Advertisement Strategies for food retailers. Implications of 4P's and advertising strategies for retail business (small, family owned and "large business) consumers, and producers. Location management. Managing Retail Operations, Managing Retailers' Finances, Merchandise buying and handling, Merchandise Pricing, Logistics, procurement of Food products and Handling Transportation of Food Products. Retail Sales Management Types of Retail Selling, Salesperson selection, Salesperson training, Evaluation and Monitoring, Customer Relationship Management, Managing Human Resources in retailing, Legal and Ethical issues in Retailing. Measuring of the efficacy of these principles and its' long term effects on consumers and business (small, family owned and large business). Implications for AGBM programs for equipping students with relevant and applicable skills.

Practical

Field visits to organized food retailers.

Theory

Agricultural input marketing - meaning and importance; Management of distribution channels for agricultural input marketing; Agricultural inputs\ and their types - farm and non-farm, role of cooperative, public and private sectors in agri- input marketing. Seed-Importance of seed input; Types of seeds- hybrid, high yielding and quality seeds; Demand and supply of seeds; Seed marketing channels, pricing, export-import of seeds; Role of NSC and State Seed Corporation. Chemical Fertilizers-Production, export-import, supply of chemical fertilizers, Demand/consumption, Prices and pricing policy; subsidy on fertilizers; marketing system marketing channels, problems in distribution; Role of IFFCO and KRIBCO in fertilizer marketing. Plant Protection Chemicals- Production, export/ import, consumption, marketing system marketing channels; Electricity/Diesel Oil- marketing and distribution system; pricing of electricity for agriculture use; subsidy on electricity. Farm Machinery- Production, supply, demand, Marketing and distribution channels of farm machines; Agro-industries Corporation and marketing of farm machines / implements/Equipments.

Theory

Overview of commodity marketing system, the challenges and opportunities in Commodity Trading, Behaviour of Agriculture Commodity Markets, Business and Policy Aspects, Physical

Markets/Spot Market, Forward Contract, Futures Contract, Auction and Reserve Auction, Futures, Exchanges and Trading, Indian Business Environment, Indian Commodity Futures Market, Price Discovery, Commodity Futures, Trading Activities in Futures Market, Individual Trading Behaviour, Hedging and Speculation in Futures Market, Market Equilibrium and Performance, Sectoral Analysis (agri. commodities), Technical Analysis, Forecasting Techniques, Performance and Efficiency of Futures Market, Online Marketing Systems in Indian Futures Market, Different type of Futures Markets in India. Contract farming

Practical

Field visit to spot market, forward contract, futures contract, auction and futures market

ABM 532 Agri S

Agri Supply Chain Management

(1+1)

(1+1)

Theory

Supply Chain: Changing Business Environment; SCM: Present Need; Conceptual Model of Supply Chain Management; Evolution of SCM; SCM Approach; Traditional Agri. Supply Chain Management Approach; Modern Supply Chain Management Approach; Elements in SCM. Drivers of Supply Chain-Inventory, Facilities, Transportation, technology, sourcing and pricing, Demand Management in Supply Chain: Types of Demand, Demand Planning and Forecasting; Operations Management in Supply Chain, Basic Principles of Manufacturing Management. Procurement Management in Agri. Supply chain: Purchasing Cycle, Types of Purchases, Contract/ Corporate Farming, Classification of Purchases Goods or Services, Traditional Inventory Management, Material Requirements Planning, Just in Time (JIT), Vendor Managed Inventory (VMI). Logistics Management: History and Evolution of Logistics; Elements of Logistics; Management; Distribution Management, Distribution Strategies; Pool Distribution; Transportation Management; Fleet Management; Service Innovation; Warehousing; Packaging for Logistics, Third-Party Logistics (TPLI3PL); GPS Technology. Concept of Information Technology: IT Application in SCM; Advanced Planning and Scheduling; SCM in Electronic Business; Role of Knowledge in SCM; Reverse Logistics, pricing and revenue management.

Practical

Preparing supply chain models.

ABM 533 Business Mathematics

Theory

Functions and progressions- introduction, definition of constant, parameter, variable and function, types of functions, solutions of functions, business applications, sequences and series, Arithmetic progression, geometric progression. Differential Calculus- Introduction, set theory, Venn diagram, maxima and minima, limit & continuity, concept of slope and rate of change, concept of derivative, Rules of differentiation, business applications of the derivatives, concepts of maxima and minima with managerial application. Integral Calculus, Introduction, Concept of Integration, Standard result of integration, integration using partial fractions, Definite integrals, Business application of the integration, Matrices- Introduction, definition and notation, Some special matrices, matrix representation of Data, Operations on matrices, Determinant of a square matrix, inverse of a matrix, inverse of matrix. Solution of linear simultaneous equations, Application in Business, Application

of matrices. Trigonometric, functions, concept of slope, rate of change, Standard result of trigonometry, rules of trigonometry, Applications to business problems. Sequences and Series-Arithmetic progression, Geometric Progression.

Practical

Solving business oriented problems on the topics covered above

Theory

Poultry and hatchery industry; role of management in poultry industry. Planning and establishing a poultry and hatchery unit-location, size and construction; farm and hatchery equipments and physical facilities; organizing and managing a poultry farm and hatchery. Broiler farm management, layer farm management, vertical integration in poultry. Incubation and hatching; production of quality chicks and eggs; factors affecting hatchability; bio- security and hatchery sanitation; handling of hatching eggs; maintaining chick quality-chick grading, sexing, packing, dispatch, transportation and chick delivery. Franchise hatcheries; custom hatching; brooding; growing and laying management; crisis management; industrial breeding, feeding, housing and disease management; waste management; Record management; cost accounting and budgetary control. Risks and insurance; personal management-labour relations including wages and salaries, job evaluation and employee appraisal; marketing management-direct sale and sale through franchisees/agents, advertisement, sale and after sale services, other innovative sales strategies.

Practical

Field visit to poultry production units, hatcheries.

Theory

Introduction, importance and scope of floriculture industry; Recent advances in floriculture industry. Evolution of new cultivars; and production technology of ornamental plants; special techniques for forcing of flowers for export. Drying and dehydration of flowers; response of flowers to environmental conditions; importance and scope of landscape gardening. Style of gardening, Anesthetic and Socio-aesthetic planning of old and newly developed towns and cities; commercial cultivation of flower crops (rose, jasmine gladiolus, tuberose, marigold, aster, carnation, gerbera, cilium chrysanthemum; use of plant regulators in flower production. Extraction, purification and storage of essential oils and perfumes; post-harvest changes in cut flowers, storage and packing of cut flowers; determining optimum time of harvesting of flowers for export and home use.

Practical

Field visit to floriculture units.

ABM 536 Rural Marketing (2+0)

Theory

Concept and scope of rural marketing, nature and characteristics of rural markets, potential of rural markets in India, rural communication and distribution. Environmental factors - socio- cultural, economic, demographic, technological and other environmental factors affecting rural marketing. Rural consumer's behaviour - behavior of rural consumers and farmers; buyer characteristics and buying behaviour; Rural vs urban markets, customer relationship management, rural market research. Rural marketing strategy - Marketing of consumer durable and non-durable goods and

services in the rural markets with special reference to product planning; product mix, pricing Course Objective, pricing policy and pricing strategy, distribution strategy. Promotion and communication strategy - Media planning, planning of distribution channels, and organizing personal selling in rural market in India, innovation in rural marketing.

Theory

Meaning and scope, agricultural marketing and economic development; Agricultural market structure - meaning, components and dynamics of market structure; marketing strategy - meaning & significance, formulation of marketing strategy; agribusiness marketing environment, design of marketing mix, market segmentation and targeting, determinants of consumer's behaviour. Product management - product management process and decisions, new product development - significance and classification of new product, stages and estimation of demand of new product; product life cycle. Pricing policies and practice for agribusiness - determinants of price, objectives of pricing policies and pricing methods. Promotional" management - advertising planning and execution; sales promotion; grading and standardization. Distribution management - storage and warehousing and transport. .ion management for agricultural products; marketing agencies/ intermediaries - roles and functions; distribution channels involved in agribusiness.

Theory

Brief History of e-commerce (EC) - EC Definitions &Concepts- The Dimensions of Electronic commerce. Pure EC: all dimensions are digital-Partial EC: a mix of digital and physical Dimensions. Internet vs Non-Internet EC- VANs-value-added networks-LANs-Local Area Networks. Single computerized machines using a smart card in a vending machine- Using a cell phone to make an online purchase Inter Organizational Systems. E-markets-Inter Organizational Information Systems (IOS), Consumer-to-business (C2B)-Consumer-to-consumer (C2C) Mobile commerce (m-commerce)- Local-commerce-(L- commerce), Consumer-to-consumer (C2C)-Exchange (Electronic Exchange-to-exchange) Business-to-employee (B2E)-E- government Government-to-citizens, Interdisciplinary Nature of EC- EC Successes-EC Failures. Business Models-Business Plans and Business Cases-Structure of Business Models. Typical Business Models in EC-Online, direct marketing-Electronic tendering systems. The Benefits of EC-Benefits to Organizations-Benefits to consumers-Benefits to Society. Inter organization and Collaboration - Reach vs richness- Supply chain improvements-Mass customization-Mass production, The Limitations of EC- Technical limitations.