MBA in Agri- Business

Paper Code	Semester I	Paper Code	Semester II
101	Management concepts and practices	201	Agriculture Environment & Policies
102	Business Communication	202	Computer Fundamentals
103	Managerial Economics	203	Research Methodology
104	Organisational Behaviour	204	Financial Management
105	Accounting & Costing	205	Human Resource Management
106	Marketing & Retailing of Agriculture	206	Digital & Social Media Marketing
107	Operations Management	207	Supply Chain & Logistic Management

Paper	Semester III	Paper	Semester IV
Code		Code	
301	Strategic Management	401	Enterprise and Project
			Management
302	Business Statistics & Analytics	402	Fertilizer and Chemical
303	Disaster Management	403	International Trade &
			Sustainability Governance
304	Rural Credit & Finance for	404	Diffusion and adoption of
	Agriculture.		innovations / Agro Processing
			and Machinery Management
305	Seed Production	405	Post-harvest Management
306	Horticulture and Floriculture	406	Environment and Green
			Technology
307	Computer Applications and	407	Project (Viva Voce)
	Information Systems		

MASTER OF BUSINESS ADMINISTRATION (MBA) AGRI-BUSINESS DEGREE COURSE

(Year 2021-22)

SEMESTER-I

(60-40 pattern)

101- Introduction to Agri-Business Management

UNIT I

Agri-business: Meaning, definition, history and scope of agri-business (Input, Farm Product Sectors). Importance of agri-business in the Indian economy. Changing dimension of agricultural business.

UNIT II

Agri-business Management-distinctive features, nature and components, importance of good management, definition of management and management functions, Five Years Plans and agribusiness, characteristics of plans.

UNIT III

Organization and operation of farm business, tools of farm business organization and operation, steps in farm business organization. Evaluation of available resources, appraisal and goals of farm business and approach to reorganization of the farm business.

UNIT IV

Farm adjustment programme under uncertainty, job of proficient farm planner, farm accountancy. Constraints in agri-business management infrastructure, technological, social and cultural. Analysis of farm records; Farm inventories.

UNIT V

Financial Management of Agri-business: Importance of Financial Statement, Balance sheet, Income account/ Profit and Loss Statement, Efficiency measures, Partial and Complete budgeting.

Reference Book:

- Dhondyal, S.P. Farm Management: An Economic Analysis. Friends Publications, 90, Krishnapur, Meerut 250 002.
- Johl, S.S and T.R Kapur. Fundamentals of Farm Business Management. Kalyani Publishers, 11 Rajendar Nagar, Ludhiana 114 008, P 475
- Kahlon, A.S and Karan Singh. Economics and Farm Management in India: Theory and Practice. Allied Publishers Pvt. Ltd, 15 JN Heredia Marg, Ballard Estate, Mumbai 400 038.
- Singh I.J. Elements of Farm Management Economics. Affiliated East West Press, Pvt Ltd, New Delhi.

102-Business Communication

Objective

The course aims to make students proficient in written as well oral communication" The focus will be business related communication.

Course Contents

UNIT I

Introduction to communication, Communication process, Barriers to Communication, EffectiveCommunication, types of communication in organisations viz. Downward, Upward, Horizontal, Static Vs dynamic.

UNIT II

Non-Verbal communication, communication through clothes/ colours / space/ symbol, Bodylanguage and etiquettes, interpersonal communication, self-concept and communication' AssertiveCommunication.

UNIT III

Types of business writing viz, Newsletters, Reports, Folders, Fact sheets' Press release; Readershipand writing style - human aspects of writing'

UNIT-IV

Ordinary Meetings - Planning for meeting, tips for chairing, opening, progress members, the character of business meeting, Energies for meetings' Group discussions' brain storming sessions and presentations'

UNIT V

Handing personal communication. Letters, dictation, reading, problem solving, listening skills, self-talk, self-reflection, steps to personal creativity, public speaking, Business etiquette'

Reference Book:

- Brown: '2006' Communication Facts and deos in Business Prentice Hal
- Basic Business Communication' McGraw Hill'
- Ramachandran KK, Lakshmi KK & Karthik KK' 2007' Business Communication.

103-Managerial Economics

Objective

To familiarize the students with the fundamental economic concepts and principles in the context of managerial decision making.

Contents

UNIT I

Scope of managerial economics, objective of the firm and basic economic principles; Mathematical concepts used in managerial economics.

UNIT II

Demand analysis - meaning, types and determinants of demand; demand function; demand elasticity; demand forecasting-need and techniques.

UNIT III

Production, cost and supply analysis- production function, least-cost inputcombination, factor productivities and returns to scale, cost concepts, cost-output relationship, short and long-run supply functions.

UNIT IV

Pricing-determinants of price - pricing under different market structures, pricing of joint products, pricing methods in practice, government policies and pricing

UNIT V

Market structure -Concepts of competition and Monopoly, Pricing Strategies and Tactics.; Long term planning decisions Risk and Decision making, Capital Budgeting , Case studies.

Reference Book:

- Baumol WJ. 1980. Economic Theory and Operations Analysis. PrenticeHall of India.
- Craig PH & Chris LW. 1996. Managerial Economics. Prentice Hall ofIndia.
- Dernberg TF. et. al. 1986. Macro Economics: Concepts, Theories and Policies. McGraw Hill.
- Dwivedi DN. 2002. Managerial Economics. Vikash Publ.
- Gupta GS. 1997. Managerial Economics. Tata McGraw Hill.
- Koutsoyiannis A. 1989. Modern Micro Economics. Mac Millan Press.

104- Organizational Behaviour

Objective

To acquaint the learner with meaning and concepts of management and organizational behaviour. Focus will be on understanding the concepts, processes, significance, and role of management and organizational behaviour.

Contents

UNIT I

Nature, Scope and Significance of Management, Evolution of Management Thought, Approaches to Management, Functions of a Manager, Planning -Types, Steps, Course Objective, Process, Strategies, Policies, MBO, Strategic Planning Process, SWOT analysis, Organizing – Structure & Process, Line Staff, Authority & responsibility.

UNIT II

Staffing – Selection process, Directing – Training, Communication & Motivation, Controlling-Significance, Process, Techniques, Standards & Benchmarks, Management Audit.

UNIT III

Nature, Scope and Significance of Organizational Behaviour; Evolution and Historical Background of Organizational Behaviour; Models of Organizational Behaviour Foundations of individual behaviour, Diversity, Micro Organizational behaviour - Personality, self-concept, self-esteem and Self-Efficacy; Attitudes, Perception, Power – types & structures.

UNIT IV

Motivation- Types of motivation. Theories of motivation, Applications of motivation. Transactional analysis-Johari window-self-fulfilling prophecy, Interpersonal relations understanding, determinants, and developing; leadership styles and influence process; leadership theories; types of leaders, and effective leader; group dynamics-, types of groups, group formation, Group decision making, Team Building.

UNIT V

Organizational culture or climate-concept, dimensions, ethos, determinants; organizational conflicts-concepts, sources, implications, and management; organizational changes - types, resistances to change, role of change agents.

Reference Book:

- Fred Luthans 1998. Organizational Behavior. Tata McGraw Hill.
- Harold Koontz & Keing Weighhrich. Essentials of Management. McGraw Hill.
- John W Newstrom& Keith Davis. 1997. Human Behaviour at Work. Tata McGraw.
- Robert C Appleby. 1997. Modern Business Administration. Macmillan India.
- Stephen P Robbins 2007. Organizational Behaviour. Prentice Hall.
- Stoner James AF. 2005. Management. Pearson Edu.

105 – Accounting and Costing

Objective

The objective of this course is to expose the learner to the concept and methods offinancial and management accounting. Focus will be on understanding techniques, usesand applications of financial and management accounting.

Contents

UNIT I

Financial Accounting- Meaning, Need, Concepts and Conventions; Branches of Accounting, Internal and External Users of Accounting, Advantages and Limitations of Financial Accounting, Accounting Standards.

UNIT II

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.

UNIT III

Managing 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, Management Audit and Financial.

UNIT IV

Cost Accounting – Nature, Course Objective, Significance of Cost Accounting; Classification of Cost, Costing for Material, Labour, and Overheads; Marginal Costingand cost volume profit Analysis- Its Significance, Uses and Limitations; Standard Costing– Its Meaning, Uses and Limitations; Determination of Standard Cost, Variance AnalysisMaterial, Labour and Overhead.

UNIT V

Responsibility Accounting- Its Meaning and Significance, Cost, Profit and InvestmentCentres, Accounting for Price Level Changes- Concepts, CPP and CCA Methods.Budget and Budgetary Control- Its Meaning, Uses and Limitations, Budgeting and ProfitPlanning, Different Types of Budgets and their Preparations, Sales Budget, PurchaseBudget, Production Budget, Cash Budget, Flexible Budget, Master Budget, Zero BasedBudgeting.

Reference Book:

- Horngren. 2008. Introduction to Financial Accounting. 8th Ed. Pearson Edu.
- Khan MY & Jain PK. 2004. Management Accounting. Tata McGraw Hill.
- Maheshwari SN &Maheshwari SK. 2003. Financial Accounting. 3rd Ed. VikasPubl.House.

106 Marketing & Retailing of Agriculture

UNIT-I:

Introduction of Agriculture and agricultural products (including agriculture, horticulture, sericulture, floriculture) - Agricultural Marketing - Role of marketing - Concepts - Goods and services - Movement of product from farm to consumer – Middlemen – Moneylenders - Types of agricultural markets (basic classification).

UNIT-II:

Basic structure and facilities of an agricultural market – Primary, secondary and tertiary markets–Functioning of Market Yards–Market information, Government market policies and regulations- Contract farming -Government Apps for marketing of agriculture products. Dissemination of market information –and role of ICT. Marketing - Mix- Product element-Place element- Promotion element. Selection of target market.

UNIT III

Retailing:

Overview of retailing: Definition, Scope, Role and Functions of retailers, Advantages of Retailing, Organized and Unorganized Retailing, Drivers of agro retail change in India, Emerging Trends in Retailing in India, Role of Retail in Nation's Economy. Modern Retail Formats in Agriculture Direct Selling, Direct Marketing, Catalogue Marketing, Tele Marketing

UNIT IV

Services Associated with agriculture. Processing of Agricultural Products, Agricultural Marketing Agricultural Retailing, Agricultural Finance, and HRM in agri business. Market implications of new retail developments, value chain and value additions across the chain in Agro retail, Agro service marketing.

UNIT V

Managing Retail Operations, Managing Retailers' Finances, Merchandise buying and handling, Merchandise Pricing, Logistics, procurement of Agricultural products and Handling Transportation of Agricultural Products.

Reference Books:

- S. S. Acharya & N.L. Agarwala, Agricultural Marketing in India Oxford and IBH Publications
- K.S. Habeeb Ur Rahman Rural Marketing in India Himalaya publishing
- S.S. Chinna Agricultural Marketing in India KALYANI publishers
- Publications of National Institute of Agricultural Marketing, Odisha
- Retail Marketing Management: David Gilbert, Pearson Publication
- Retail Management: Arif Sheikh, Himalaya Publishing
- 7.Berman& Evans. 2008. Retail Management: A Strategic Approach.10th Ed. Prentice Hall of India

107- Operation Management

UNIT I

Nature and Scope of Production and Operations Management; its relationship withOther Systems in the Organization; Factors Affecting System location, Types ofManufacturing Systems and Layouts, Layout Planning and Analysis.

UNIT II

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.

UNIT III

Scheduling, Maintenance Management Concepts, Work Study, Method Study, Work Measurement, Work Sampling, Work Environment, Industrial Safety,

UNIT IV

An Overview of Material Management, Determination of Material Requirement, PurchaseManagement, Store Management, Logistics management, Material Planning andInventory management, JIT, Safety Management.

UNIT V

Quality Assurance, Accepting Sampling, Statistical Process Control, Total QualityManagement, ISO standards and their Importance, Introduction to reengineering, value Engineering.

• Reference Book:

- Adam & Ebert. 2006. Production and Operations Management: Concepts,
- Models and Behaviour. 5th Ed. Prentice Hall of India.
- Buffa ES. 2008. Modern Production/Operations Management. Wiley India.
- Stevenson WJ. 2005. Operations Management. Tata McGraw Hill

MASTER OF BUSINESS ADMINISTRATION (MBA) AGRI-BUSINESS DEGREE COURSE

(Year 2021-22)

SEMESTER -II

201- Agriculture Environment and Policy

Objective

To expose learners to the environment in which the agri-business is conducted. Focus will be on understanding micro and macro environmental forces and their impact on agri-business.

Contents

UNIT I

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.

UNIT II

Structure of agriculture - linkages among sub-sectors of the agribusiness sector; economic reforms and Indian agriculture; impact of liberalization, privatization and globalization on agribusiness sector.

UNIT III

Emerging trends in production, processing, marketing and exports; policy controls and regulations relating to the industrial sector with specific reference to agro-industries.

UNIT IV

Agribusiness policies- concept and formulation; and new dimensions in agri business environment and policy.

UNIT V

Agricultural price and marketing policies; public distribution system and other policies.

Suggested readings

- Adhikary m. 1986. Economic environment of business. S. Chand & sons.
- Aswathappa k. 1997. Essentials of business environment. Himalaya publ.francischerunilam 2003.
- Business environment. Himalaya publ.

202- Computer Fundamentals

Objective

The objectives of this course include developing an appreciation of various software, hardware and communication systems available in the industry among the students. The capture, storage, management and retrieval of organizational data are essential to provide information necessary for effective decision making. Therefore managers require computer skills to enable them perform their duties effectively.

Course contents

Unit -I Basics

- Introduction to computers basics-hardware & software, types of software, computers basics-hardware & software, types of software, operating system features, operating systemasmanager, application programs & packages, system security, virus, types of virus, Antivirus, firewall
- Introduction to is-TPS, MIS, DSS, ELS & enterprise information systems
- Computerbuying-decisions

- Tapping information library-searchingskills
- Search & browse skills using internet,
- Web page (html, forms) basics working with html tags, colors, hyperlinks, unordered lists, definition lists, marquee, tables, forms
- Websites, web servers, web hoisting & emailbasics
- Effective use of blogs, forums from a businessperspective
- Internet as collaboration tool cloudcomputing
- E-commerce understanding of e-commerce, generation of ecommerce, need & importance of e-commerce, application of ecommerce

Unit-II Information Processing- Analyses Skills

- Excel basics-spreadsheet, range, formulas, functions, charts
- Excel as analyses tool understand 'what if analysis, use of solver and scenario manager & pivot tables to analyzedata.
- Excel built-in functions- commonly used functions from date & time, logical, financial,
- Statistical function groups
- Databases at yourfingertips
- Basic concepts, database management system architecture, relational databaseconcepts
- Manage a database list in MS access by sorting, finding and summarizing data.

Unit -III Presentation & Reporting

MS power point basics, using power point templates and slide layouts, slide transition and animation, presentation views and slide show, creating a business plan using built-intemplates

Unit -IV Documentation Basics

- MS word basics, formatting text and documents, working with header footer, tables, mail merge, using built-in documenttemplates
- Communicationworkshop
- MS outlook basics, email account settings management
- mail merge using MS excel as data source and outlook as emailclient

Unit -V Data Communication

Computer networks (LAN, MAN, WAN), network hardware, reference model, transmission mode, transmission media (guided,unguided)

Suggested readings:

- 1. Working with Ms Office-Tata Mcgraw Hill 2. Office2007
- 2. Bible, John Walkenbach, WileyIndia
- 3. Fundamentals of database management system, renuvig, ektawalo, indian society of technicaleducation
- 4. Networking, joseph rlevy
- 5. Mastering html-ray & ray, BPBpublication
- 6. The antivirus book-saumil ushah
- 7. E-commerce strategies- charlestrepper, phi

203- Research Methodology in Business Management

Objective

The objective of this course is to develop an understanding of research methodology. The focus will be on process and techniques of research.

Contents

UNIT I

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.

UNIT II

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.

UNIT III

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.

UNIT IV

Role and uses of quantitative techniques in business decision making, Use of Equations, Use of Determinants and Matrices in business decisions, Frequency Distribution, Measures of central Tendency, Measures of Variation, Skewness and Kurtosis, Simple, partial, and multiple correlation' rank correlation, simple and multiple regression, Discriminant and dummy variable analysis.

UNIT V

Index Numbers, Hypothesis testing, ANOVA, Factor analysis, cluster analysis, conjoint analysis, multidimensional analysis etc, Report writing: Types of report, essentials and contents of good report writing.

Suggested Readings

- Cooper DR & Schindler PS. 2006. Marketing Research concepts ond cases' Tata McGraw Hill.
- Green PE, Tull DS & Albaum G. 1998. Research for Marketing Decisions. Prentice Hall of India.
- Kothari CR. 1989. Research Methodology' Wiley Eastern'
- wilkinson&Bhandarker 1989. Research Methods in social sciences' Himalaya Publ' House.

204- Financial Management

Objective

The course aims to make students proficient in concepts and techniques of financial management. Focus will be on developing understanding of the application of Financial and investment decisions.

Contents

UNIT I

Introduction to Financial Management, Its meaning and functions, Interface of financial management with other functional areas of a business. Financial Statements and Analysis - Proforma Balance Sheet and Income Statements, ratio, time series, common size and Du-Pont analysis.

UNIT II

Capital Structure, Determinants of size and composition of Capital Structure, Capital Structure Theories; Long term financing and Cost of Capital.

UNIT III

Working Capital Management, Determinants of Size and Composition of Working Capital, Cash and receivables management, Working Capital Management Theories, Financing of Working Capital.

UNIT IV

Financial planning and Forecasting, Financial planning for mergers & acquisition, Capital Budgeting, Undiscounted and Discounted cash flow methods of Investment Appraisal; Hybrid finance and lease finance.

UNIT V

Business Financing System in India, Money and Capital Markets, Regional and All -India Financial Institutions; venture capital financing and its stages, micro finance and International financial management.

Suggested Readings

- Chandra P. 2000. Financial Management. Tata McGraw Hill.
- Khan MY & Jain PK. 2004. Financial Management: Text, Problems and Cases. Tata
- McGraw Hill.
- Pandey IM. 1997. Financial Management. Vikas Publ. Ramachandran N & Kakani RK.
- 2005. Financial Accounting for Management. Tata McGraw Hill.
- Van Horne JC. 1997. Financial Management and Policy. Prentice Hall.

205 - Human Resource Management

Objective:

The objective of this course is to expose the learner to the field of human resource Management. The focus will be on human resource practices and their utility for Managers.

Contents

Unit I

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.

Unit II

Recruitment and Selection Process, Induction, Training and Human Resource Development-Nature, Significance, Process and Techniques, Internal Mobility Including Transfers, Promotions, Employee Separation.

Unit III

Performance Appraisal – Significance and Methods, Compensation Management, Wage and Salary Administration - Course Objective; Wage Fixation; Fringe Benefits, Incentive Payment, Bonus, and Profit Sharing.

Unit IV

Industrial Relations-Role and Status of Trade Unions; Collective Bargaining; Worker's Participation in Management, Career Planning And Employee Retention.

Unit V

Quality Of Work Life, Employee Welfare Measure, Disputes And Grievance Handling Procedures; Arbitration And Adjudication; Health And Safety Of Human Resources; Human Resources Accounting, Human Resources Outsourcing.

Suggested Readings

- Ashwathapa K. 1997. Human Resource Management. Tata Mcgraw.
- FlippoEb. 1984. Personnel, Management. Mcgraw-Hill.
- Garry D. 2001. Human Resource Management. 7th Ed. Prentice-Hall Of India.
- MamoriaCb. 1996. Personnel Management. Himalaya Publ. House.
- Subba Rao P. 2004. Essentials of Human Resource Management And Industrial Relations. Himalaya Publ. House.

206- Digital and Social Media Marketing

Objective

This course will acquaint the learners to create a structured digital marketing plan and budget, Identify the correct measures to set objectives and evaluate digital marketingStudents will be able to identify the importance of the Social media marketing for marketing success, to manage customer relationships across all social & digital channels and build better customer relationships

UNIT I

Introduction & origin of Digital Marketing. Traditional v/s Digital Marketing. Digital Marketing Strategy, The P-O-E-M Framework, Segmenting & Customizing Messages, The Digital landscape, Digital Advertising Market in India. Skills required in Digital Marketing. Digital Marketing Plan.

UNIT II

Social Media Marketing: Meaning, Purpose, types of social media websites. Blogging: Types of blogs, Blogging platforms & recommendations. Social Media Engagement, Target audience, Sharing content on social media, Do's and don'ts of social media. Search Engine Optimization: Meaning, Common SEO techniques, Understanding Search Engines, basics of Keyword search, Google rankings, Link Building, Steps to optimize website. Basics of Email Marketing: Types of Emails, Mailing List, Email Marketing tools, Email Deliverability & Email Marketing automation

UNIT III

Understanding Web Analytics: Purpose, History, Goals & objectives, Web Analytic tools & Methods. Web Analytics Mistakes and Pitfalls. Basics of Content Marketing: Introduction, Content marketing statistics, Types of Content, Types of Blog posts, Content Creation, Content optimization, Content Management & Distribution, Content Marketing Strategy, Content creation tools and apps, Challenges of Content Marketing.

UNIT IV

Introduction to Social Media Marketing: The Role of Social Media Marketing, Identifying Target Audiences, Rules of Engagement for SMM, overview of Digital Marketing, Social media Channels: Types and models, Social media benefits and applications. Social media

marketing framework. Consumer behavior on the Internet: Basics, evolution of the digital consumer, managing consumer demand & IMC

UNIT V

Social media marketing campaign: Elements of marketing campaigns, implementing social media marketing campaigns, Budgeting. Managing social media marketing revenue: social media marketing revenue sources, managing service delivery and payments. Social media execution, campaign analytics

Suggested readings

- Digital Marketing: Cases from India by RajendraNargundkar and RomiSainy, Notion Press. Inc
- Digital Marketing by Seema Gupta, McGraw Hill Education
- Dan Zarella, Social media marketing, O reilly.
- R Solomon and Tracy, Social Media Marketing: Pearson New International Edition
- Ryan, D. (2014). Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation, Kogan Page Limited.

207- Supply Chain and Logistics Management

Unit I

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.

Unit II

Demand management in supply chain: types of demand, demand planning andForecasting; operations management in supply chain, basic principles ofmanufacturing management.

Unit III

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

Unit IV

The principles of logistics: definitions and significance of logistics. Logistical system of services elements of logistics, distinction between procurement logistics, production logistics and distribution logistics, service level, logistics and corporate strategy, supply chains and networks.

Unit V

Logistics systems: logistical infrastructure, basic terminology, types and functions, transport infrastructure and superstructure, transport routes and transport networks, logistics real estate, logistics parks, and freight villages, information infrastructure and communication infrastructure, telecommunication infrastructure, satellite systems and satellite navigation

Suggested reference books:

• Supply chain logistics management, Donald bowers ox, David closs, m bixby cooper, tatamcgraw hill.

- Introduction to materials management, j.r. Tony arnold, stephen chapman, ramakrishnan, pearson.
- Supply chain and logistics management: concepts, methodologies, tools, and applications, by information resources management association, us.
- Altekarry. 2006. Supply chain management: concepts and cases. Prentice hall of
- India.
- Monczka r, trent r & handfield r. 2002. Purchasing and supply chainmanagement.
- Thomson asia.

MASTER OF BUSINESS ADMINISTRATION (MBA) AGRI-BUSINESS DEGREE COURSE

(Year 2021-22)

SEMESTER-III

(60-40 pattern)

301: Strategic Management

Objectives:

To equip students with the core concepts, frameworks, and techniques of Strategic management.

Unit I- Strategic Management and Strategic Intent

- 1.1. Introduction to Strategic Management- Evolution, Concept, Phases & Benefits of Strategic Management.
- 1.2. Nature, Characteristics of Strategic Intent Formulation of -Vision, Mission, Goals & Objectives,
- 1.3. Levels of Strategic Management.

Unit II- Strategy Formulation

- 2.1. Environmental & Organizational Appraisal
- 2.1.1. Concept, Reducing Carbon Emission, Environment appraisal
- 2.1.2. SWOT and PESTLE Analysis
- 2.1.3. Environmental Scanning-Competitive intelligence
- 2.1.4. Organisational appraisal Capability factors, Value chain analysis (Industry & Corporate)
- 2.2. Corporate & Business Level Strategies (8)
- 2.2.1. Types- Expansion, Stability, Retrenchment and combination, Integration Diversification Strategies

- 2.2.2. Porter's Generic Business Strategies
- 2.2.3. Strategies for Different Industry conditions (Industry Life Cycle Analysis)

3. Strategic Analysis and Choice

- 3.1. Selecting the best Strategy, Process of Strategic Choice
- 3.2. Strategic Analysis- Corporate Portfolio Analysis- BCG Product Portfolio and GE Nine Matrix Cell, Competitor Analysis
- 3.3. Industry Analysis- Porter five forces analysis

4. Strategy Implementation

- 4.1. Procedural Implementation & Resource Allocation
- 4.2. Behavioural Implementation-Strategic Leadership.
- 4.3. Structural Implementation Interrelationship of Structure and Strategy, Structures for Business and Corporate Strategies
- 4.4. Functional Implementation.

5. Strategy Evaluation and Control

- 5.1. Strategic Evaluation- Nature, Importance and Barriers
- 5.2. Strategic Control and Operational Controls.
- 5.3. Techniques of Strategic Evaluation and Control

6. Case Studies:

Comprehensive Cases on various strategic situations and at least 10 cases based on application of strategic management must be discussed & solved.

REFERENCE BOOKS

- Strategic Management and Business Policy-AzarKazmi, The McGraw Hill
- Strategic Management 4 e Burgelman McGraw Hill
- Strategic Management Dess, Kim McGraw Hill
- Business Policy and Strategic Management : Concepts and Applications□ Vipin Gupta, Kamala Gollakota, R. Srinivasan -Prentice Hall India
- Concepts in Strategic Management and Business Policy- Thomas L. Wheelen, J. David Hunger, Wheelen Thomas L.- Pearson
- Strategic Management ☐ P.Subba Rao Himalaya Publishing House.
- Strategic Management–Kachru McGraw Hill

302- BUSINESS STATISTICS AND ANALYTICS

Contents

Unit - I

Sampling: Primary Data and Secondary Data Collection Techniques, Questionnaire Design. Tabulation of data and general rules of Tabulation. Diagrammatic and Graphical presentation of data.

Unit – II

Measures of Central Tendency: Measures of Dispersion, Measures of Skewness and Interpretation, Correlation and Regression Analysis, Method of Least squares. Types of Correlation and their specific applications.

Unit – III

Statistical Inference: Introduction to Null hypothesis , Alternative Hypothesis, Tests of Hypothesis, Procedure for Testing of Hypothesis, Tests of significance for small samples, Application, t-Test, ANOVA – One Way and Two Way Classifications with Business Applications.

Unit – IV

Chi-square test, Association of Attributes and Inferences: Parametric- Parametric vs. NonParametric, Sign Test, Sign Rank Test, Run Test, Median test, McNemar's Test, Kruskal-Wallis Test with Business Applications.

Unit – V

Time series: Utility of Time Series, Components, Business Applications, Measurement of Trend through Method of Least Squares, Moving averages, and Graphical methods, Measurement of Seasonal variations.

Text Books

- 1 Donald R. Cooper, Pamela S. Schindler: Business Research Methods, TMH, 8/e, 2009
- 2 Gaur, Statistical Methods for Practice and Research, Sage Publication, 2009

Reference Books

- 1 Bhandarkar Wilkinson, Methodology and Techniques of Social Research, Himalaya, 2009
- 2 Bajpai, Business Statistics, Pearson, 2009
- 3 Richard I Levin & David S.Rubin, Statistics for Management, Pearson, 7/e, 2008

303- DISASTER MANAGEMENT

Contents

UNIT I

Natural Disasters- Meaning and nature of natural disasters, their types and effects. Floods, Drought, Cyclone, Earthquakes, Landslides, Avalanches, Volcanic eruptions, Heat and cold Waves, Climatic Change: Global warming, Sea Level rise, Ozone Depletion

UNIT II

Man Made Disasters- Nuclear disasters, chemical disasters, biological disasters, building fire, coal fire, forest fire. Oil fire, air pollution, water pollution, deforestation, Industrial wastewater pollution, road accidents, rail accidents, air accidents, sea accidents.

UNIT III

Disaster Management- Efforts to mitigate natural disasters at national and global levels. International Strategy for Disaster reduction. Concept of disaster management, national disaster management framework; financial arrangements; role of NGOs, Community-based organizations, and media. Central, State, District and local Administration; Armed forces in Disaster response; Disaster response: Police and other organizations.

Suggested Readings:

- Gupta HK. 2003. Disaster Management. Indian National Science Academy. Orient
- Blackswan.
- Hodgkinson PE & Stewart M. 1991. Coping with Catastrophe: A Handbook of
- Disaster Management. Routledge.
- Sharma VK. 2001. Disaster Management. National Centre for Disaster
- Management, India.

304- Rural Credit and Micro Finance

Unit I

Financing Agriculture and agri-allied sectors in rural area in India: Agricultural creditorganisational pattern and evolution; Primary Agricultural Credit Societies (PACS) - Functions. Management, Crop loan system; District Central Cooperative Banks- Functions, Management, Credit Policy, Scale of finance, disbursement of loans procedure; State Cooperative Banks- its role in the development of Co-operative movement in a State; Agricultural Refinancing Assistance to Agricultural Credit Co-operatives – Role of NABARD – Procedure and norms of refinance; Financial assistance and Scheme of NABARD in Farm Sector. Joint Liability Group (JLV) – its concept, formation and functions.

Unit II

Reforms of Co-operative Credit Structure Revival of Short Term Co-operative Credit Structure (STCCS) Long Term Cooperative Structure (LTCCS) in India --- Recommendation of Vaidyanathan Committee and its implementation – Post reform role of RBI and NABARD

Unit III

Financing Non-Farm Sector (NFS) in Rural Area in India Non- farm Sector – Concept and definition; Govt. Policy on non-farm sector financing – Scheme of Non-farm Sector – Role of NABARD, KVIP, SIDBI,NCDC in financing Non- farm Activities.

Unit IV

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.

Unit V

Diversifying Micro- financial services and Capacity Building of SHG Micro- insurance, Health insurance – innovations in credit delivery systems – income generating activities of SHG – Capacity Building of SHGs; Scope and limitation of designing, developing and implementing training of SHGs.

Unit VI

Case Studies on:a) Rural Credit b) Micro-finance

305- Seed Production: Principles and Practices

Objective: To introduce the basic principles of quality seed production

UNIT-I

Introduction: Seed as basic input in agriculture; seed development in cultivated plants; seed quality concept and importance of genetic purity in seed production; types of cultivars, their maintenance and factors responsible for deterioration; seed production in self and cross pollinated crops.

UNIT-II

Mode of pollination and reproduction in crop plants and their modification in relation to hybrid seed production. Principles of hybrid seed production, isolation distance, synchronization of flowering, rouging etc. male sterility and incompatibility system in hybrid seed production, role of pollinators and their management.

UNIT-III

Seed multiplication ratios, seed replacement rate, demand and supply; suitable areas of seed production and storage, agronomy of seed production – agro climatic requirements and their influence on quality seed production; generation system of seed multiplication; maintenance of Nucleus seed, production of Breeder, Foundation and Certified seed– criteria involved; life span of a variety and causes for its deterioration; certification standards for self, cross pollinated and vegetative propagated crops.

UNIT-IV

Hybrid Seed - Methods of development of hybrids; use of male sterility and self-incompatibility and CHA in hybrid seed production; one, two and three line system; maintenance of parental lines of hybrids; planning and management of hybrid seed production technology of major field crops and vegetables.

UNIT-V

Planning of seed production for different classes of seeds for self and cross-pollinated crops, Seed quality control system and organization, seed village concept; Seed production agencies, seed industry and custom seed production in India.

Suggested Readings

• Agarwal RL. 1997. Seed Technology. 2nd Ed. Oxford & IBH.

- Chhabra AK. 2006. Practical Manual of Floral Biology of Crop Plants. Dept. of Plant Breeding CCS HAU, Hisar.
- Desai BB. 2004. Seeds Handbook. Marcel Dekker. Kelly AF. 1988. Seed Production of Agricultural Crops. Longman.
- McDonald MB Jr& Copeland LO. 1997. Seed Production: Principles and Practices. Chapman & Hall.

306- Horticulture & Floriculture

Unit I: - Introduction to Horticulture

Horticulture: Definition, importance of horticulture in terms of economy, production. Employment generation, environmental protection and human resource development, Divisions of horticulture with suitable examples and their importance, Area, production of Horticultural crops in India, Fruit and vegetable zones of India, Export scenario and scope for Horticulture in India.

Unit II: - Classification Horticulture Crops

Classification of horticultural crops based on soil and climatic requirements, Vegetable crop gardens & Nutrition and kitchen garden & tracer garden & vegetable forcing & market garden & roof garden, Gardens in floriculture & flower gardens & soil and mixed gardens; land scape Horticulture

Unit III: - Fundamental of Floriculture

Introduction and scope; branches of industry Present situation & scope in India, Environmental factors, ecological physiology, dormancy, growth regulators. - Cultivation under protection. - Garden implements and important operations, Methods of propagation. - Time of Propagation.

Unit IV: - Planting Materials and their Cultivation Practices

Importance of identification and classification. Description of the categories of ornamental plants, lawns, pot plants, cut flower crops, bulbous plants, annuals and other bedding plants, rock garden plants and aquatic plants. Cultural practices: soil and climate, land preparation and planting, manuring, irrigation and other intercultural operations. Control of insect pests, diseases and weeds.

Unit V: -Landscaping & Indoor Gardening

Importance and scope. History & styles of gardens, famous gardens. Application of elements and principles. Features and components of gardens. Home gardens and garden structures. Enrichment items and right lighting. Soil, water and energy conservation through Landscaping, Selection of plants based on landscape

References:-

- 1. Prasad and Kumar, 2014: Principles of Horticulture 2 ND Edition Agribios India
- 2. Kumar, N., 1990 Introduction to Horticulture. Rajyalakshmi Publications

307- Computer Application & information system

UNIT- I

Introduction to Computer and Problem Solving-Information and Data Hardware-CPU, Primary and Secondary storage, I/O devices, Bus structure, Computer Peripherals- VDU, Keyboard, Mouse, Printer. Software and Types of Software, Programming Languages- Machine Language, Assembly Language, High Level Language, Object Oriented Language.

UNIT-II

Internet- Introduction to networks and internet, history, working of Internet, Modes of connecting to internet, ISPs, Internet address, standard address, domain name, Modems . World Wide Web- Introduction, Miscellaneous Web Browsers details, searching the www Directories search engines and meta search engines, search fundamentals, search engines, working of the search engines, Telnet and FTP.

Unit III

Information technology— concept, applications, advantages and prerequisites, choice of information technology, Information needs of organization, Types/classification of information system for organizations, Security, privacy and ethical issues in information systems and internet

Unit IV

Introduction to emerging trends technology, Expert system, knowledge management, A.I. data mining, data warehousing, E-CRM, software development life cycle and models

Unit V

Data and Information - Data Definition, Data Processing Systems, Data Type Numeric, Alphabetic, Audio, Graphic, and Video and Their Presentation; Data Processing- Introduction to Data Processing, Computer as a Tool For Data Processing, Data Processing Cycle, Data Processing Techniques, Data Analysis, Data Inputs and Outputs, Data Processing Management, Data Security.

References:-

- 1. Computer Organization & Architecture –Designing & Performance, William Stallings, Prentice Hall of India.
- 2. Alfred Glkossbrenner- Internet 101 Computing MGH, 1996
- 3.Lucas. 2004. Information Technology for Managemenf. McGraw Hill.
- 4. Norton P. 1998. Introduction to Computers. 2nd Ed. Tata McGraw Hill.
- 5. Rajaraman V. 2006. Introduction to Information Technology. Prentice Hall of India.

AGRI-BUSINESS DEGREE COURSE

(Year 2021-22)

SEMESTER-IV

60-40 Pattern)

401- Enterprise and Project Management

UNIT-I: Enterprise

Meaning, Importance, Basic concepts, Business mind, Product selection, Site location, Technical, Financial and Marketing viability

UNIT- II: MarketSurveyandOpportunityIdentification

Howtostart a smallscale industry , Proceduresforregistrationofsmallscaleindustry, Listofitemsreservedforexclusivemanufactureinsmallscaleindustry, Assessmentof demandandsupplyinpotentialareasof growth, Understandingbusinessopportunity, Considerationsinproductselection, Datacollectionfor settingupsmallventures.

UNIT-III: EmergingareasinEnterprises

Entrepreneursinagriculture, New developments in agri. Business, Women Entrepreneurs: Types, Challenges, Opportunities, Achievements, Problems, RemedialMeasures & supporting Institutions and Role Models of Woman Entrepreneurs in India, Self HelpGroups,RuralEntrepreneurs:meaning,need,Problems,Development,RoleofNGO's,TRYSEM., SocialEntrepreneurs:Genesis&Characteristic, Entrepreneurs:Concept,PurposeandEssence.

UNIT-IV: Project

Concept, Classification, Identification, Project Design, Project Appraisal, Project Planning, Marketingplan, financial planand theorganizational plan, Financing of the Project Sources of Finance, Role of Financial Institutions – Commercial Banks, IDBI, ICICI, SIDBI, SFC's, IFCI, NABARD, Venture Capital, Angle Capitalist.

UNIT- V: Project Management

Business Planning Process - The business plan as an entrepreneurial tool Elements of BusinessPlan, Objectives, Market Analysis, Development of product / idea, Marketing, Finance,Organization & Management, Ownership, Critical risk contingencies of the proposal, Schedulingandmilestones. ProjectMonitoringandControl—

Parameters, Process Technical, Financial, Marketing Personnel and Management Feasibility Reports

Reference Books:

- EntrepreneurshipDevelopment and smallbusinessEnterprises–PoornimaCharantimath
- Dynamics of Entrepreneurship Development and Management Vasant Desai, Himalaya
- EntrepreneurshipDevelopmentbyS.S.Khanka–S.Chand

- Entrepreneurship Development and Project Management by Neeta Baporikar, Hiimalaya
- ProjectManagementbyGray, Larson- TataMcGrawHill
- ProjectManagementbyVasantDesai-Himalaya
- ProjectManagement byMaylor-Pearson
- Projects-PrasannaChandra-CFMTMHProfessionalSeries -TataMcGrawHill
- Project Management: Managerial Approach by Jack R. Mereditts and Samuel J. MantelJr., WilleyPublications

402. Fertilizer and Chemicals

1. Introduction

Chemicals used in fertilizers, Content, proportion and composition of different chemicals in fertilizers

- 2. Fertilizers used in farming
- ${\bf 3.} \ \ Fertilizer Technology and Management$
 - 3.1. Roleof FertilizersinAgriculture
 - 3.2. Fertilizer Feedstock and Raw Materials Acids used for Fertilizer Production, Complex and MixedFertilizers, Secondary Nutrient fertilizers, Micronutrient Fertilizers
 - 3.3. FertilizerLegislationandQualityControl
 - 3.4. FertilizerMarketing
 - 3.5. FertilizersandEnvironmentalPollution
- 4. Safety and hazards in fertilizer industry and uses,

Injuries or accident causes, dust related challenges facing in fertilizer industry, Occupational safety and health in fertilizer industry and its uses

Reference Books:

- 1. Banerjee, G.C. TextBook of Animal Husbandry. Oxford and IBM Publishers, New Delhi.
- 2. Sashry, N.S.R.C.K. Thomasand R.A. Singh. Farm Animal Managemen tand Poultry Production. NSR, Vikas Publishing House Pvt. Ltd. Delhi.
- 3. HandBookofAnimalHusbandry,ICAR,NewDelhi.
- 4. Singh, R.A. Poultry Production. Publishers, New Delhi.

403- International Trade and Sustainability governance

Objective

To impart knowledge to the students of international trade in agriculture and various provisions under WTO in the new trade regime.

Contents

UNIT I

International trade – basic concepts, WTO and its implications for Indian economy in general and agriculture sector in particular.

UNIT II

TRIPS, TRIMS quotas, anti dumping duties, quantitative and qualitative restrictions, tariff and non-tariff measures, trade liberalization, subsidies, green and red boxes, issues for negotiations in future in WTO; CDMs and carbon trade.

UNIT III

Importance of foreign trade for developing economy; absolute and comparative advantage, foreign trade of India.

UNIT IV

Composition of India's foreign trade policy; India's balance of payments; inter regional Vs international trade; tariffs and trade control; exchange rate; the foreign trade multiplier.

UNIT V

Foreign demand, supply side analysis, opportunity cost, trade and factor prices, implications for developing countries, market entry methods, export procedures&documentations.

Suggestive Readings

- Chadha GK. 2003. WTO and Indian Economy. Deep & Deep.
- Economic Survey of India. Ministry of Finance, Govt. of India. (various
- issues)
- HAU 2003. Refresher Course on Technological Interventions to Face WTO Challenges.
- AAREM & HRD CCS HAU Hisar.
- Indian Journal of Agricultural Economics
- Vasisht AK & Singh Alka. 2003. WTO and New International Trade
- Regime- Implication for Indian Agriculture. Advance Publ. Concept.

404- Diffusion and adoption of innovations

Objectives:

To make the students aware and knowledgeable about the science behind the process of diffusion and innovation decision as well as different factors that influences the process of diffusion and innovation of innovation. Besides, to build up capacity of students to plan for diffusion and adoption of different farm innovation.

UNIT I

Diffusion – concept and meaning, elements; traditions of research on diffusion; the generation of innovations; innovation-development process; tracing the innovation-development process, converting research into practice.

UNIT II

The adoption process- concept and stages, dynamic nature of stages, covert and overt processes at stages, the innovation-decision process – a critical appraisal of the new formulation.

UNIT III

Adopter categories – Innovativeness and adopter categories, adopter categories as idealtypes, characteristics of adopter categories; Perceived attributes of Innovation and their rate of adoption, factors influencing rate of adoption.

UNIT IV

Diffusion effect and concept of over adoption, opinion leadership- measurement and characteristics of opinion leaders, monomorphic and polymorphic opinion leadership, multistep flow of innovation; concepts of homophily and heterophily and their influence on flow of innovations; Types of innovation-decisions – Optional, Collective and Authority and contingent innovation decisions; Consequences of Innovation-Decisions – Desirable or Undesirable, direct or indirect, anticipated or unanticipated consequences; Decision making – meaning, theories, process, steps, factors influencing decision – making.

Practical

Case studies in individual and community adoption process, content analysis of adoption studies, Identification of adopter categories on a selected technology, study of attributes of current farm technologies, Identification of opinion leaders, Sources of information at different stages of adoption on a selected technology, study of factors increasing or retarding the rate of adoption, presentation of reports on adoption and diffusion of innovations.

405- Post-harvest Management

Contents

UNIT I

World production and horticulture in India; present status of fruit industry in India and emerging scenario.

UNIT II

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.

UNIT III

Post-harvest management in horticulture- procurement management, important factors for marketing, standardization and quality control, packaging.

UNIT IV

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.

UNIT V

Problems in marketing of fruits, and government policy; quality standards for domestic and international trade

406- Environment and Green Technology

Objectives: Green Technology is an approach to the design, manufacture and use of chemical products so as to reduce or eliminate chemical hazards intentionally. The goal of Green Technology is to create better, safer, chemicals while choosing the safest, most efficient ways to synthesise them. The main goal of Green Technology is to eliminate hazards right at the design stage. The principles of Green Technology demonstrate how chemical production could be achieved without posing hazard to human health and environment while at the same time being efficient and profitable.

Contents:

- **Unit 1**. Introduction of Green protocol: Need, Goal and Limitation of Green Technology, Principles of Green Technology with their explanations and examples. Sustainable development, atom economy, reduction of toxicity. (5 Lectures)
- **Unit 2**. Waste: Production, Prevention, Problems and Source of waste, cost of Waste, Waste minimization technique, waste treatment and recycling. (5 Lectures)
- **Unit 3.** Environmental chemicals: Chemical speciation speciation of lead, mercury, arsenic and chromium. Structure and property-activity relationship, fate of organics in the environment transformation reactions (hydrolysis, elimination, oxidation-reduction etc). Risk evaluation of environmental chemicals, Biochemical effects of arsenic, lead, mercury and pesticides. (6 Lectures)
- **Unit 4**. Water and Biodegradation: Analysis of water and water quality parameters concept of pH, measurement of acidity, alkalinity, hardness, residual chlorine, chlorides, DO, BOD, COD, fluoride and nitrogen.

Biodegradation – biodegradation of carbohydrates, proteins, fats and oils and detergents. (5 Lectures)

- **Unit 5.** Atmosphere: Structure of atmosphere, chemical and photochemical reactions in the atmosphere. Ozone Chemistry: formation and depletion of ozone layer, oxides of nitrogen and sulphur. Acid rain mechanism of formation and effects. Photochemical smog, and sulfurous smog. Greenhouse effect, global warming, greenhouse gases. (7 Lectures)
- **Unit 6.** Green Synthesis and Catalysis: Green oxidation and photochemical reactions, Microwave and Ultrasound assisted reactions, Synthesis of Green Reagents, Green solvents.

Classification of catalysts, heterogeneous and homogeneous catalysis, bio-catalysis. (7 Lectures)

Unit - 7. Green Industrial Processes: Pollution statistics from various industries, polymer industry, textile industry, greener approach of dyeing, ecofriendly pesticides, pharmaceutical industry, waste water treatment. (7 Lectures)

Text:

- 1. 1. C.N Sawyer, P.L McCarty and G.F Parkin, Chemistry for Environmental Engineering and Science, 5th ed. Tata McGraw-Hill, 2003
- 2. 2. Das, A. K. Environmental Chemistry with Green Chemistry, Books and allied (P) Ltd.
- 3. 3. Ahluwalia, V.K. Green Chemistry: Environmentally Benign Reactions, Ane Books India, New Delhi, 2006.

- 4. Sanghi, R. and Srivastava, M.M. Green chemistry: Environment Friendly Alternatives, Narosa Publishing House.
- 5. Paul Anastas, John C. Warner, John Warner Joint; Green Chemistry: Theory and Practice New Ed Edition; Oxford University press, USA, 2000

407- Project (Viva Voce)