CENTRAL UNIVERSITY OF PUNJAB, BATHINDA



MBA (AGRIBUSINESS) PROGRAMME

Session - 2020-22

Department of Applied Agriculture School of Basic and Applied Sciences

Programme learning outcomes:

The programme of MBA Agribusiness

- Emphasises the application of economic and business principles for strengthening agribusiness and rural sector by adopting an action learning approach, with an emphasis on entrepreneur and soft skills development.
- It targets to evaluate the leadership capacity, teamwork skills, negotiation power and communication abilities with an understanding to agribusiness and rural development and analyse current global, regional and domestic agribusiness environment and market structure by enhanced strategic capabilities and planning.



SEMESTER I

Course	Nature		Ho	urs/w	eek	
Code course		Course Title		Т	P	Credits
ABM.506	CF	Quantitative Techniques for Business Decisions		0	0	2
ABM.507	С	Marketing Management	4	0	0	4
ABM.508	С	Principles of Management and Organizational Behaviour		0	0	4
ABM.510	С	Introductory Accounting for Business	4	0	0	4
ABM.511	С	Agribusiness and Rural Environment		0	0	4
CST.501	CF	Computer Applications	2	0	0	2
CST.502	CF	Computer Applications - Lab	0	0	4	2
IDC	IDC	Interdisciplinary Course	2	0	0	2
ABM.512	IDC	Essentials of Management (For students of other departments)	2	0	0	2
		Total				24

SEMESTER II

Course	Nature		Ho	urs/w	eek	
Code of Course Title course		Course Title	L	Т	P	Credits
ABM.523	С	Financial Management	4	0	0	4
ABM.524	С	Production and Operations Management	4	0	0	4
ABM.525	С	Human Resource Management	4	0	0	4
ABM.509	С	Managerial Economics	4	0	0	4
ABM.522 ABM.555 ABM.556 ABM.557 ABM.572	DE	General Elective/MOOC's (opt any one Course) Food and Agriculture Policy Agri-Supply Chain Management International Agribusiness Trade Commodity Markets and Futures Trading Business Laws and Ethics	4	0	0	4
IDC	IDC	Interdisciplinary Course	2	0	0	2
ABM.527	IDC	Organizational Behaviour (For students of other departments)	2	0	0	2
ABM.591	SBE	Rural Immersion Module	0	0	8	4
		Total				26

SEMESTER III

Course	Nature	liouis, week		eek		
Code	of course	Course Title	L	T	P	Credits
ABM.551	С	Operations Research	4	0	0	4
ABM.552	С	Strategic Management	4	0	0	4
ABM.553	С	Agricultural Marketing Management	4	0	0	4
ABM.521	С	Business Research Methods	4	0	0	4
ABM.592	SBE	Summer Internship	0	0	12	6
ABM.543	SBE	Seminar – I	0	0	0	1
XXX.XXX	EF	Value Added	1	0	0	1
Value added course to be offered to students of other departments					ents	
FST.504	VAC	Nutrition and Specialty Foods 1 0 0			1	
		Total			24	

SEMESTER IV

	Nature	SEMESTER IV	Ho	urs/w	eek	
Course Code	of course	Course Title	L	T	P	Credits
ABM.528	С	Project Management and Agripreneurship Development		0	0	4
-		Industry oriented		0	0	4
ABM.575 ABM.576 ABM.577 ABM.578	DE	Elective (opt any one Course) Food Retail Management Agricultural Input Marketing Management of Contract Farming Agri-Produce Post Harvest Management				
ABM.573	DEC	Recent Trends in Agribusiness Management – I	0	2	0	2
ABM.574	Recent Trends in Agribusiness		0	2	0	2
ABM.544	SBE	Seminar – II	0	0	0	1
ABM.599	SBE	Project Report	0	0	0	6
XXX.XXX	VAC	Value Added		0	0	1
Value	Value added course to be offered to students of other departments					
FST.504	VAC	Nutrition and Specialty Foods	1	0	0	1
		Total				20

Total Credits = 24 + 26 + 24 + 21 = 95

C = Core; CF = Compulsory Foundation; DE = Discipline Elective; IDC = Inter Disciplinary Course; EF = Elective Foundation/Value Added; SBE = Skill-Based Elective; DEC = Discipline Enrichment Course

Note

- 1. The Electives will be chosen by the student among those being offered by the Department in a particular Academic Session/Semester depending upon the infrastructure and academic expertise of the faculty members available in the Department. The decision of Department regarding Electives to be offered in a particular Academic Session/Semester shall be final and binding to the concerned.
- 2. Rural Immersion Module has to be carried out separately during the Winter Break (After completion of First Semester)

Evaluation Criteria for Theory Courses

The theory courses shall be evaluated by Continuous Assessment, Mid Semester Test and End Semester Exams as detailed below

Continuous Assessment

Surprise tests (Average of two best) : 10 marks
Assignment : 05 marks
Term paper : 10 marks
Mid Semester Test : 25 marks
End Semester Exam (Subjective) : 25 marks
End Semester Exam (Objective) : 25 marks

Course Code: ABM 506

Course Name: Quantitative Techniques for Business Decisions

]	L	T	P	Cr
2	2	0	0	2

Learning Outcome:

After completion of the course the students will be able to

- 1. Demonstrate various statistical tools, sampling designs, testing, hypothesis etc.
- 2. Determine sampling size and carry out the research survey.
- 3. Applying these tools to carrying out the research work during their academic and industrial life.
- 4. use software applications for statistical analysis.

UNIT I 8 hours

Introduction to Statistics, Statistical Survey - Planning and Execution, Basic terms - Units or Individuals - Population or Universe -Sample -Quantitative - Characteristic - Qualitative Characteristic - Variable, Collection of Data-Primary Data - Secondary Data - Pilot survey, Scrutiny and Editing of Data. Classification, Tabulation and Presentation of Data: Frequency and Frequency Distribution, Presentation of Data - Tabulation, Cross Tabs, Diagrams, Graphical Presentation - Histogram.

UNIT II 7 hours

Measures of Central Tendency and Dispersion, Mean, Median, Mode, Dispersion, Range, Quartile deviations, Mean deviation, Standard Deviation - Properties of standard deviation Coefficient of Variance; Theory of Probability – Definition, Basic Terminology, Approaches; Rules of probability - Addition rule - Multiplication rule , Conditional Probability, Steps Involved in Solving Problems on Probability; Random Variables; Theoretical Probability Distributions, Discrete & Continuous probability distribution, Binomial Distribution, Poisson Distribution, Normal Distribution - Standard Normal Distribution

UNIT III 8 hours

Sampling and Sampling Distributions: Introduction, Population and Sample - Universe or Population - Types of Population - Sample, Advantages of Sampling, Errors in Statistics, Measures of Statistical Errors, Types of Sampling - Probability Sampling - Non-Probability Sampling, Determination of Sample Size; Making Statistical Inference, Criteria of a Good Estimator - Unbiasedness - Efficiency - Consistency - Sufficiency, Point Estimates, Interval Estimates, Confidence Intervals, Determining the Sample Size in Estimation

UNIT IV 7 hours

Testing of Hypothesis in Case of Large and Small Samples, Statistical test used for hypothesis, t-Test, Z-test, F-test, Chi-square test, Test of goodness of fit; Correlation analysis, Types of Correlation, Karl Pearson's correlation

coefficient, Spearman's Rank Correlation Coefficient, Partial Correlations, Multiple Correlations, Regression - Regression analysis - Regression lines - Regression coefficient, Standard Error of Estimate, Multiple Regression Analysis, Reliability of Estimates, Application of Multiple Regressions

Transaction Modes: Lecture, Seminar, Tutorial, Problem solving, Case analysis

Suggested Readings:

- 1. Aczel, A.D. and Sounderpandian, J., (2008). Complete Business Statistics, Tata McGraw Hill.
- 2. Anderson, D.R., Sweeney, D.J., Williams, T.A., Camm, J.D., and Cochran, J.J., (2007). Quantitative Methods in Business, Cengage Learning.
- 3. Bierman H. Jr, C.P. Bonini and W.H. Hausman, (2000). Quantitative Analysis for Business Decisions, 7th Edition, Homewood, Ill., Irwin.
- 4. Levin, R.I., D.S. Rubin and J.P. Stingson, (2009). Quantitative Approaches to Management, McGraw Hill.
- 5. Taha, Hamdy A., (2014). Operations Research: An Introduction, Prentice Hall of India.
- 6. Vohra N.D., (2010). Quantitative Techniques in Management, The McGraw Hill companies.

Course Code: ABM 507

Course Name: Marketing Management

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of the course the students will be able to

- 1. Assess the importance of marketing, pricing, advertising, forecasting and development of new and existing products and services for the industry.
- 2. Analyzing various alternatives at managerial roles in the industrial and corporate sector.
- **3.** Interpret the depth knowledge of branding.

UNIT – I 15 hours

The Concept of Marketing Management; Marketing Environment; Marketing Mix, Strategic Marketing, Market Segmentation, Targeting, and Positioning; Buyer Behaviour, Marketing Information System, Marketing Organization and Control.

UNIT – II 15 hours

Marketing potential and forecasting, Classification of Products; Product Life Cycle; New Product Development; Product Line and Product Mix; Branding, Packaging and labeling.

UNIT – III 15 hours

Factors affecting prices; Pricing Policies and Strategies; Pricing Methods, Types of Distribution Channels; Functions of Channel Members; Channel Management Decisions.

UNIT – IV 15 hours

Promotion Mix; Introduction to Advertising, Personal Selling, Sales Promotion, Publicity and Public Relations, and Direct marketing, managing integrated marketing promotion, Customer Relationship Management.

Transaction Modes: Lecture, Seminar, Brain storming, Case study, Case analysis

Suggested Readings

- 1. Ghosh P. K., (2002). Industrial Marketing. Oxford University Press, New Delhi.
- 2. Kotler, P. & Keller, K., (2015) Marketing Management. *Pearson Publishers*, New Delhi.
- 3. Neelamegham, S., (1988). Marketing in India: Cases and Readings, Vikas, New Delhi.
- 4. Palmere, A., (2011). Principles of Service Marketing. Oxford University Press.
- 5. Ramaswamy, V. S. and Namakumari, S., (2002). Marketing Management, Planning and Control. Macmillan India Ltd., New Delhi.

Course Code: ABM 508

Course Name: Principles of Management and Organizational

Behaviour

L T P Cr 4 0 0 4

Learning Outcome:

After completion of the course the students will be able to

- 1. Interpret management level activities in an organised manner such as planning, directing, controlling the human and other resources in an organization.
- 2. Assess the behavior of employees, their needs and rewards.
- 3. Support and accomplishing the goals of both the employees & organization.
- 4. Adapt Knowledge management and the ways to serve society under CSR.

UNIT-I 15 hours

Management-nature, scope, significance and functions, Management theories, Planning, Organizing, Directing, Staffing, Controlling, Reviewing, Budgeting, Management By Objectives (MBO), MBO in India, Decision Making, Delegation of Authority, Organizational Communication, Corporate Social Responsibility (CSR), Knowledge Management, Business Crisis and Crisis Management.

UNIT-II 15 hours

Introduction to Organizational Behaviour: An Evidence Based Approach, Environmental Context: Globalization, Diversity and Ethics, Organizational Context: Design and culture, Organizational context: Reward Systems; Cognitive Processes of Organizational Behaviour: Personality, Perception and Employee Attitudes;

UNIT-III 15 hours

Motivational Needs, Basic Motivational Processes, Work-Motivation Theories, Processes and Applications; Positive Organizational Behaviour and Psychological Capital; Dynamics of Organizational Behaviour: Business Communications; Stress and Conflict: Coping Strategies for Stress and Conflict, Negotiation Skills: Going beyond Conflict Management; Power and Politics.

UNIT-IV 15 hours

Groups and Teams: Nature of Groups, Dynamics of Informal Groups, Dysfunctions of Groups and Teams; Behavioural Performance Management, Principles of Learning: Reinforcement and Punishment, Role of Organizational Rewards Systems; Effective Leadership Process, Traditional and Modern Theoretical Processes and Theories of Leadership, Leadership in New Environment,

Transaction Modes: Lecture, Seminar, Case analysis, Case study, and Problem solving.

- 1. Cherunilam, F., 1993, Organisational Behaviour, Himalaya Publishing House, New Delhi.
- 2. Greenberg, J., 2013, Behavior in Organisations, PHI Learning Private Limited, New Delhi.
- 3. Harold, K. and Weirich, H.,2005, Management A Global Perspective, McGraw Hill Education, 11th edition.
- 4. John A. Wagner III, J. A. andHollenbeck, J. R., 2015, Organizational Behaviour, Routledge Taylor & Francis Group, New York.
- 5. Kolb, D., 1991, Organizational Behaviour: Practical Readings for Management, 5th Englewood Cliffs, New Jersey, PHI.
- 6. Luthans, F., 2013, Organisational Behaviour, Prentice Hall of India, 12th Edition, New Delhi.
- 7. Mainiero, L. A. and Tromley C. L., 1985, Developing Mangement Skill in OB, New Delhi, PHI.
- 8. Meena Sharma, 2016, Principles of Management, First Edition, Himalaya Publishing House, New Delhi.
- 9. Neck, C. P., Houghton, J.D. and Murray E.L., 2017, Organizational behavior, Sage Publication India Private Limited.

10. Robbins, S.P. and Vohara, N.,2011, Organisational Behaviour, Pearson Education, New Delhi.

Course Code: ABM 510

Course Name: Introductory Accounting for Business

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of the course the students will be able to

- 1. Interpret various methods to maintain accounts and financial transactions to operate a business/organization.
- 2. Analyze and report the accounting and financial information in systematic manner to the management.
- 3. Determine the importance of all accounting principles as per the Companies Act 2013.
- 4. Evaluate the significance of accounting in an organisation.

Unit I 15 hours

Management Accounting: Meaning, Function, Scope, Utility, Limitation and Tools of Management Accounting, Relationship among various streams of accounting, Analysis of Financial Statement: Ratio Analysis, Common Size Statement, Cash Flow Statement and Fund Flow Statement.

Unit II 15 hours

Classification of Cost, Costing for Material, Labour and Overheads; Standard Costing: Meaning, Uses, Limitation and Determination of standard cost, Variance analysis: Material, Labour and Overheads.

Unit III 15 hours

Budget and Budgetary Control: Meaning, Uses and Limitation, Budgeting and Profit Planning, Different Types of Budgets and their presentations, Sales Budget, Purchase Budget, Production Budget, Cash Budget, Flexible Budget, Master Budget, Zero Based Budgeting.

Unit IV 15 hours

Responsibility Accounting - Concept, Steps in Responsibility Accounting, Responsibility Centres, Transfer Pricing, Marginal Costing - Concept, Significance, Advantages and Limitation, Cost-Volume-Profit Analysis, Application of Marginal Costing in Decision Making

Transaction Modes: Lecture, Case study and Problem solving.

Suggested Readings:

1. Bhattacharjee, A. K., 2012, Financial Accounting for Business Management. Prentice Hall India: New Delhi.

- 2. Bhattacharyya, D., 2017, Management Accounting. . Prentice Hall India: New Delhi.
- 3. Pandey, I. M. 2014, Management Accounting. Vikas Publishing House, New Delhi.
- 4. Ramachandran, N. and Kakani, R. K., 2013, Financial Accounting for Management, Tata McGraw-Hill Education Pvt. Ltd. Nodia
- 5. Rao, T. M. E., 2011, Cost and Management Accounting, New Age Publishers.

Course Code: ABM.511

Course Name: Agribusiness and Rural Environment

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of the course the students will be able to

- 1. Assess the rural and urban community.
- 2. Analyse the importance of Indian agriculture.
- 3. Interpret the socio-economic and technological changes, and also the structure of Indian agriculture.
- 4. Recommend reforms to make various decisions and policies for agriculture.

UNIT I 15 hours

Rural Socio-economic change, Land Reforms, Agrarian transition-Pre-green revolution and post green revolution, rural financial inclusion as well as exclusion, Rural technological Inclusion as well as Exclusion. Rural Urban Migration and its impact on agriculture, Globalization and rural economy, Impact of Media on Rural Culture. Case Studies.

UNIT II 15 hours

Importance of rural community in Indian economy, Status of Employment, Income and Consumption in Rural India, Characteristics of Indian Rural community. Role of Agriculture in Indian Economy. Case Studies.

UNIT III 15 hours

Structure of Agriculture - Linkages among sub-sectors of the Agribusiness sector; economic reforms and Indian agriculture; impact of liberalization, privatization and globalization on Agri business sector. Case Studies.

UNIT IV 15 hours

Introduction to agribusiness environment, Key factors of agribusiness environment-finance, infrastructure, legal and regulatory framework, Stakeholders in the establishment of enabling environments-public as well as private roles. Case Studies.

Transaction Modes: Lecture, Seminar, Case study, Case analysis, Group discussion.

Suggested readings:

- 1. Deshpande, R.S. and Arora, S., 2010, Agrarian crisis and farmer suicides. Sage publications, Delhi.
- 2. Gupta, K. B., Siddiqui, F. and Alam, I., 2014, Rural Management, CBS Publishers and Distributors Pvt. Ltd., Delhi.
- 3. Konig, G., Da Silva, C. A. and Mhlanga, N., 2013, Enabling environments for agribusiness and agro-industries development: Regional and country perspectives, FAO, Roma (Italia).
- 4. Palanithurai, G. and Ramesh, R., 2011, Globalisation and rural development. Concept publishing company, Delhi.
- 5. Sabharwal, D., 2002, New Technology and Agrarian Change, Sanjay Publication, Delhi.
- 6. Singh, K., 2009, Rural Development: Principles, Politics and Management, Sage Publications India Pvt. Ltd., Delhi.

Course Code: CST.501

Course Title: Computer Applications

Total Hours: 30

L	T	P	Cr
2	0	0	2

Course Objectives:

Upon successful completion of this course, the student will be able to:

- Use different operating system and their tools easily.
- Use word processing software, presentation software, spreadsheet software and latex.
- Understand networking and internet concepts.
- Use computers in every field like teaching, industry and research.

Course Contents

UNIT I

Computer Fundamentals: Introduction to Computer, Input devices, Output Devices, Memory (Primary and Secondary), Concept of Hardware and Software, C.P.U., System bus, Motherboard, Ports and Interfaces, Expansion Cards, Ribbon Cables, Memory Chips, Processors, Software: Types of Software, Operating System, User Interface of popular Operating System, Introduction to programming language, Types of Computer.

UNIT II

Computer Network: Introduction to Computer Network, Types of Network: LAN, WAN and MAN, Topologies of Network, Internet concept, WWW.

Word Processing: Text creation and Manipulation; Table handling; Spell check, Hyper-linking, Creating Table of Contents and table of figures, Creating and tracking comments, language setting and thesaurus, Header and Footer, Mail Merge, Different views, Creating equations, Page setting, Printing, Shortcut keys.

UNIT III

Presentation Tool: Creating Presentations, Presentation views, working on Slide Transition, Making Notes Pages and Handouts, Drawing and Working with Objects, Using Animations, Running and Controlling a Slide Show, Printing Presentations, and Shortcut keys.

Spread Sheet: Entering and editing data in cell, Basic formulas and functions, deleting or inserting cells, deleting or inserting rows and columns, printing of Spread Sheet, Shortcut keys.

UNIT IV

Use of Computers in Education and Research: Data analysis tools, e-Library, Search engines related to research, Research paper editing tools like Latex.

Transactional Modes:

PPT Video e-content google drive

- 1. Sinha, P.K. Computer Fundamentals. BPB Publications.
- 2. Goel, A., Ray, S. K. 2012. Computers: Basics and Applications. Pearson Education India.
- 3. Microsoft Office Professional 2013 Step by Step https://ptgmedia.pearsoncmg.com/images/9780735669413/samplepages/97807356694 13.pdf

Course Code: CST.502

Course Title: Computer Applications - Lab

L	T	P	Credits
0	0	4	2

The lab assignments will be based on theory paper CST.501.

Lab Evaluation:

The evaluation of lab criteria will be based on following parameters:

Evaluation Parameters	Marks
Practical File	5
Implementation	15
Viva-voce	30
Total	50

INTER-DISCIPLINARY COURSE (For students of other Departments)

Course Code: ABM.512

Course Name: Essentials of Management

L	T	P	Cr
2	0	0	2

Learning Outcome:

After completion of the course the students will be able to

- 1. Analyse the range of key management skills.
- 2. Develop improved personal communication skills.
- 3. Apply leadership skills to improve teamwork, creativity, efficiency & productivity.
- 4. Explain the various hierarchies in organizations and their roles.

UNIT-I 8 hours

Need for management; Definition, managerial skills, productivity, effectiveness and efficiency, contributions of Taylor and Fayol, Contributions of Gantt, Gilbreth, Roethlisberger, McKinsey's 7S framework, managerial roles.

UNIT-II 7 hours

Planning, Contribution of planning to purpose and objectives, types of plans, steps in planning, MBO, Strategic planning process, industry analysis and generic competitive strategies by Porter, effective implementation of strategies, forecasting methods.

UNIT-III 8 hours

Organizing, Formal and informal organization, span of management, process of organizing, Different forms of departmentation, matrix organization, SBUs,

Line and staff, factors affecting centralization & decentralization, delegation, mistakes in organizing.

UNIT-IV 7 hours

Controlling, Control process, Critical points and standards, control as a feedback, real time control, Feed forward control, requirements for effective control, control techniques (budgetary & non-budgetary), Profit and loss control through ROI, direct versus preventive control, Relevant case studies.

Transaction Modes: Lecture, Seminar, Case study, Case analysis.

Suggested Readings:

- 1. Daniel, R., Gilbert, James, A. F., Stoner, R. and Freeman. E., 2009, Management, 6thEdn. Pearson Education.
- 2. Harold, K. and Weirich, H., 2005, Management A Global Perspective. McGraw Hill Education, 11th edition.

Semester-II

Course Code: ABM.523

Course Name: Financial Management

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of the course the students will be able to

- 1. Assess the need for financial planning and budgeting.
- 2. Identify goals and needs of financial management.
- 3. Plan for maximize profits and minimize the expenses in the organization.
- 4. Construct innovative methods to improve the financial status of the organization.

UNIT I 15 hours

Introduction to Financial Management, Function of finance, Relationship of financial management with other functional areas of a business, Goals of Financial Management, Agency Problems and its remedial measures, Time value of money. Cost of Capital: Cost of Specific Source of Finance, WACC, Marginal Cost of Capital

UNIT II 15 hours

Capital Budgeting: Meaning, Significance, Kinds of Capital Budgeting Decisions, Methods of evaluation: Traditional techniques, Discounted Cash Flow techniques & Risk and Uncertainty Techniques; Determinants of Capital Budgeting, Capitalization: Theories & Stages

UNIT III 15 hours

Capital Structure, Determinants of Capital Structure, Types and Composition of Capital Structure, Capital Structure Theories: Net-Income, Net-Operating Income, Traditional and Modigliani-Miller Approach, Trade-off Theory, Agency Theory, Pecking-Order Theory, Signalling theory and Effect of Information Asymmetry on Capital Structure, EBIT-EPS Analysis, Leverage: Concept, Types of leverage, Degree of leverage, Optimal Capital Structure

UNIT IV 15 hours

Dividend Policy: Meaning, Types and Determinants of dividend policy, Working Capital: Concepts and Types, Operating and Cash Conversion Cycle, Estimation of required working capital, Financing of Working Capital, Components of Working Capital; Cash Management: Baumol's Model and Miller-Orr Model; Receivables Management: Dimensions of Credit Policy of a firm and Evaluation of Credit Policies, Credit Analysis; Inventory Management: Classification System, EOQ, Just in Time

Transaction Modes: Lecture, Problem solving, Case study and Case analysis

Suggested Readings:

- 1. Brealey R.A. and S.C. Myers, *Principles of Corporate Finance*, McGraw Hill.
- 2. Ehrhardt, M. C. & Brigham E. F, *Corporate Finance*, Indian Edition, Cengage Learning
- 3. Gitman, L. J., Principles of Managerial Finance, , Prentice Hall of India. 2017
- 4. Khan, M.Y & Jain, P.K Financial Management: Text, Problems and Cases, Tata McGraw Hill.
- 5. Pandey, I. M., Financial Management, Vikas Publishing. 2017
- 6. Van Horne, James C. and Dhamija, S. *Financial Management and Policy*, Prentice Hall of India. 2017

Course Code: ABM.524

Course Name: Production and Operations Management

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of the course the students will be able to

- 1. Evaluate the need for creation of goods and services.
- 2. Measure the production process by proper planning and utilization of raw material and human efforts in an organization.
- 3. Assess the importance of quality and inspection in production activities.
- 4. Invent efficient management of materials in all stages of production.

UNIT I 15 hours

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.

UNIT II 15 hours

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 15 hours

Scheduling, Maintenance Management Concepts, Work Study, Method Study, Work Measurement, Work Sampling, Work Environment, Industrial Safety, Safety Management. Approaches to quality management, Quality control: Statistical quality control, inspection; Total Quality Management, ISO 9000 series. Introduction to re-engineering, value engineering.

UNIT IV 15 hours

An Overview of Material Management, Determination of Material Requirement, Purchase Management, Store Management, Logistics management, Material Planning and Inventory management, JIT and Lean Systems.

Transaction Modes: Lecture, Demonstration, Tutorial, Problem solving, Case study, Case analysis

- 1. Adam, E. Everett, Ebert J. Ronald, 2003, Production and Operations Management concept, models, and behavior. Prentice Hall of India, New Delhi.
- 2. Aswathapa, K., 2005, Production & Operations Management. Himalaya Publishing House, New Delhi.
- 3. Buffa, E. S. and Sarin, R. K., 2010, Modern Production & operation Management. Wiley India Private Limited.
- 4. Chary S. N., 2000, Production & Operations Management. Tata McGraw hills, New Delhi.
- 5. Muhlemann, A., 2009, Production and Operations Management. Pearson Education, Delhi.

Course Code: ABM.525

Course Name: Human Resource Management

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of the course the students will be able to

- 1. Assess effective management of people in an organization.
- 2. Demonstrate different ways to maximize employee performance.
- 3. Apply various recruitment & training activities in an organization.
- 4. Analyzing the performance appraisal of employees in different conditions.

UNIT – I 15 hours

HRM, Importance and challenges of HRM, Functions of Human resource management Strategic HRM, Regulatory environment of HRM in India.

UNIT – II 15 hours

Human Resource Planning, Demand and Supply Forecasting, Talent acquisition, *Job analysis:* Job description & Job specification, Job Evaluation, Recruitment, Selection

UNIT – III 15 hours

Training and Development, Training need analysis, Steps in designing training improvement plan, Different types of training, Training Evaluation

UNIT – IV 15 hours

Performance Appraisal: Concept, importance, Performance Appraisal process Compensation: Concept, Compensation components: monetary and non-monetary

Transaction Modes: Lecture, Demonstration, Tutorial, Problem solving, Case study, Case analysis, Brain storming.

- 1. Aswathappa, K. and Dash, S., 2010, International Human Resource Management, Text and Cases, Mc Graw Hill, New Delhi.
- 2. Dessler, G., 2007, Human Resource Management. Prentice Hall, India Pvt. Ltd., New Delhi.
- 3. Mondy, R.W., 2006, Human Resource Management. Pearson education, New Delhi.
- 4. Rao, V. S. P., 2009, Human Resource Management-Text and Cases. Excel Books, New Delhi.

Course Code: ABM.527

Course Name: Managerial Economics

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of this course students will be able to

- 1. Identify the concepts concerned with the production, consumption, forecasting the demand & supply of the products and services.
- 2. Analysis of various economic factors and functions.
- 3. Formulate the business policies for industry purposes and also the course will guide in academic research.
- 4. Calculations of various Incomes & Indexes.

UNIT – I 15 hours

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

UNIT – II 15 hours

Introduction to Micro Economics; Demand Analysis – Demand Schedule & Elasticity of Demand, Demand Forecasting. Supply Analysis – Supply Schedule & Elasticity of Supply; Production Analysis – Production Function, Law of Variable Proportions and the Laws of Returns to Scale;

UNIT – III 15 hours

Costs - Cost Concepts for Decision Making, Cost Functions - Short Run and Long Run; Economies of Scale; Pricing, Price and Output Determination under Perfect Competition, Monopoly, Monopolistic Competition and Oligopoly; Pricing Strategies.

UNIT – IV 15 hours

Macroeconomics: Meaning, nature and scope, National income: Concepts, measurement, difficulties and importance; WPI (Wholesale Price Index), CPI (Consumer Price Index) Money supply, Monetary and Fiscal Policy. Inflation-Employment; Business cycles and business policies; business decisions under uncertainty.

Transaction Modes: Lecture, Seminar, Tutorial, Case study, Problem solving.

- 1. Barwell and Richard, 2016, Macroeconomic policy after the crash: Issues in monetary and fiscal policy, Palgrave Macmillan Publishers, New Delhi.
- 2. Chauhan, M. S., 2014, Micro Economics: A Brief Study. Global Publications, New Delhi.
- 3. D'Souza, E., 2009, Macroeconomics, Pearson Education, New Delhi.
- 4. Damodaran, S., 2007, Managerial Economics. Oxford: New Delhi.

- 5. Gupta G.S., 2014, Macroeconomics Theory and Applications, Tata McGraw Hill, New Delhi.
- 6. Gupta S.B., 2009, Monetary Economics: Theory, Policy and Institutions, S. Chand, New Delhi.
- 7. Shapiro, E., 2013, Macroeconomic Analysis, Galgotia, New Delhi.
- 8. Vaish, M.C., 2010, Macroeconomic Theory, Vikas Publications, New Delhi.

Course Code: ABM 522

Course Name: Food and Agriculture Policy

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of the course the students will be able to

- 1. Illustrate the role of agriculture in the development of the nation.
- 2. Identify significance of food and its policies.
- 3. Develop sustainable policies regarding food and agriculture at the planning level.
- 4. Improve different marketing channels & their practices.

UNIT I 12 hours

and Agricultural Economic Development, Role of Agriculture Economic/Rural Development, Theories Agricultural of Development, Population and Food supply, Need for sound Agricultural Policies, Planning for Agricultural Growth-Agricultural Policy and Programmes under Planning Periods. Case Studies.

UNIT II 11 hours

Introduction and Importance to Food Security in India, Food Security Act and Reforms in India, Public Distribution System, Targeted Public Distribution System, Case studies

UNIT III 10 hours

Agricultural Price Policy, Role of CACP, state intervention: Concept of Minimum Support Price and Procurement Price. Reforms in Agricultural Produce Marketing Committee Act-Direct marketing, contract farming, private markets etc. Case Studies.

UNIT IV 12 hours

Attainment of Self Sufficiency in Food grains: Policy initiatives in respect of Agricultural Inputs (Water, Seed, Fertilizer Policy), Promotion of Plant nutrients, Fertilizer subsidy, Agricultural Credit and Insurance; Enforcement of Minimum Wage in Agriculture, policy options for sustainable agricultural development, Agricultural taxation. Case Studies.

Transaction Modes: Lecture, Case study, Case analysis, Group discussion.

Suggested Readings:

- 1. Acharya, S. S. and Agarwal, N. L., 1994, Agricultural Prices-Analysis and Policy. Oxford and IBH Publishing, Delhi
- 2. Bhaumik, S. K., 2008, Reforming Indian Agriculture: Towards Employment Generation and Poverty Reduction: Essays in Honour of G.K. Chadha, Sage Publications India Private Limited, Delhi.
- 3. Gandhi, V. P. and Patel, N. T., 2006, Reform of the Subsidy Regime Implications for the Agriculture Sector: Review Study on Fertilizer, Seed, Diesel and Credit Subsidies, IIM Ahmedabad
- 4. Ganesh-Kumar, A., Gulati, A. and Cummings Jr, R., 2007, Foodgrains Policy and Management in India retrieved from http://www.igidr.ac.in/pdf/publication/PP-056.pdf
- 5. Singh, K., 2009, Rural development: Principles, Politics and Management. Sage Publications India Pvt. Ltd., Delhi.

Course Code: ABM.555

Course Name: Agri-Supply Chain Management

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of this course students will be able to

- 1. Manage the flow of goods and services, process of conversion of resources and efficiently running supply to deliver products to the end-user at a low cost.
- 2. Develop various supply chain models and their applications.
- 3. Formulate Inventory management techniques to control the quality and minimize the cost of handling.
- 4. Evaluate performance measurement of different methods of SCM.

UNIT I 10 hours

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 12 hours

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).

UNIT III 11 hours

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 (TPL/3PL); GPS Technology.

UNIT IV 12 hours

Concept of Information Technology: IT Application in SCM; Advanced Planning and Scheduling; SCM in Electronic Business; Role of Knowledge in SCM; Performance Measurement and Controls in Agri. Supply Chain Management-Benchmarking: introduction, concept and forms of Benchmarking.

Transaction Modes: Lecture, Tutorial, Seminar, Problem solving, Case study, Case analysis, Field visit

Suggested Readings:

- 1. Acharya, S. S., and Agarwal, N. L., 2011, Agricultural marketing in India. Oxford and IBH.
- 2. Altekar, R. V., 2006, Supply Chain Management: Concepts and Cases. PHI.
- 3. Chopra, S., Meindl, P. and Kalra, D. V., 2016, Supply chain management: Strategy, Planning, and Operation, Pearson Education India.
- 4. Monczka, R., Trent, R. and Handfield, R., 2002, Purchasing and Supply Chain Management. Thomson Asia.
- 5. Van Weele, A. J., 2000, Purchasing and Supply Chain Management Analysis, Planning and Practice, Vikas Publ. House.

Course Code: ABM.556

Course Name: International Agribusiness Trade

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of this course students will be able to

- 1. Interpret international trade concepts, policies to assist them in decision making and framing strategies in their managerial roles.
- 2. Assess functions of various agencies in international trade and their challenges which can be useful in decision making in any organization.
- 3. Determine the demand, supply, opportunity and various cost factors of the foreign markets.
- 4. Discuss different methods to enter the international markets based on the nature of operations.

UNIT I 10 hours

International trade – basic concepts, Importance of foreign trade for developing economy; absolute and comparative advantage, foreign trade of India. WTO and its implications for Indian economy in general and agriculture sector in particular. Competitive environmental forces in global business-Political, Economic, regional economic integration, cultural and human factors

UNIT II 12 hours

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; Countervailing Duty Measures and carbon trade, SPS Agreement. Regional economic groupings, World Financial Environments- Foreign Exchange market; International monetary system; Global Capital Market

UNIT III 11 hours

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. export promotion institutions with special emphasis on EPCs and commodity boards, MPEDA, APEDA and service institutes, export procedures & documentations, Role of ECGC in insurance, Backward linkages towards promotion of food quality and exports in India

UNIT IV 12 hours

Foreign demand, supply side analysis, opportunity cost, trade and factor prices, implications for developing countries, Issues and challenges encountered by exporters of agri- food products in meeting buyers requirement in different markets, International marketing - market entry methods, international product planning, pricing, promotion, distribution, legal dimensions of international marketing, Strategy and Structure of International Business

Transaction Modes: Lecture, Tutorial, Seminar, Problem solving, Case study, Case analysis.

- 1. Anant, K., Sundaram and Stewart, B. J., 2010, The International Business: Text and cases, PHI.
- 2. Bhalla V. K., 1993, International Economy- Liberalisation Process. Anmol, New Delhi.
- 3. Cherunilam, F., 2010, International Business- Text and Cases. PHI.
- 4. Economic Survey of India (various issues), Ministry of Finance, GOI.
- 5. Eiteman, D. K. and Stopnehill, A. L., 1986, Multinational Business Finance. Addition Wesley, New York.
- 6. Paul, J., 2013, International Business. PHI.
- 7. Subba Rao, P., 2008, International Business Text and Cases. HPH.

- 8. Woods, M., 2001, International Business. Palgrave.
- 9. Matthews, A. (2014). Food security and WTO domestic support disciplines post-Bali. Geneva: International Centre for Trade and Sustainable Development.

Course Code: ABM.557

Course Name: Commodity Markets and Futures Trading

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of this course students will be able to

- 1. Determine the commodity market, concepts and terms.
- 2. Assess functioning of the commodity market and regulations to trade.
- 3. Apply technological advancement in commodity trading.
- 4. Introduced to various agencies and settlement of contracts.

UNIT – I 10 hours

Introduction to commodity derivatives and price risk management in agricultural markets; organizational setup of exchanges and specifications of futures contracts in world's leading commodity exchanges

UNIT – II 12 hours

Mechanics of futures trading; hedging price risk using futures contracts; option transaction and forward transaction – concept and mechanism, price discovery mechanism and market

UNIT – III 12 hours

Clearinghouse and margin system; clearing, settlement and delivery of contracts; Market surveillance and risk control; trading in warehouse receipts (WRs): WRs and collateralized commodity financing

UNIT – IV 11 hours

Regulation of futures and trading practices in leading national and regional exchanges in India.

Transaction Modes: Lecture, Demonstration, Tutorial, Seminar, Problem solving, Brain storming.

- 1. Hull, John C. 2017. Fundamentals of futures and options markets, Boston, Pearson publication.
- 2. Ram, P. V. and Bala, S. D., 2016, Strategic Financial Management. Snow White Publ.
- 3. Bomin, C. A., 1990, Agricultural Options: Trading, Risk Management and Hedging. Wiley Publ.

4. Gupta, S.L., 2005, Financial Derivatives. PHI.

5. Sridhar, A. N., 2008,

6. Future and Options. Shroff Publishers and Distributors Pvt. Ltd.

Course Code: ABM.572

Course Name: Business Laws and Ethics

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of this course students will be able to

- 1. Analyse the ethics and aspects of good business conduct.
- 2. Explain different laws governing the business and other day to day activities which a manager should abide by in the course of conducting any business activities.
- 3. Assess the importance of ethics and governance in the business.
- 4. Evaluate different act and regulations to be performed in the course of business.

UNIT – I 11 hours

The Indian Contract Act: Essentials of a valid contract, void agreements, performance of contracts, breach of contract and its remedies, Quasi-Contracts, Sale of Goods Act1930, Indian Partnership Act 1932

UNIT – II 12 hours

Companies Act-2013: Incorporation, Commencement of Business, Memorandum and Article of Association, Doctrine of Ultra Vires, Doctrine of Indore Management, Prospectus, Share Capital, Shares, Debentures, Types of companies, Management, Meetings of Company, Mismanagement, Winding-Up of company.

UNIT – III 12 hours

Negotiable Instruments Act,1881, Consumer Protection Act, 1986, Food Safety and Standard Act 2006, Industrial Dispute Act,1947, CSR Act & provisions in India, FPO Act

Unit – IV 10 hours

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.

Transaction Modes: Seminar, Problem solving, Case study, Case analysis

Suggested Readings:

- 1. Andrew Lidbetter, (1999), Company Investigations and Public Law, Hart Publishing
- 2. Avtar Singh, (2007), Company Law, Eastern Book Company, Lucknow
- 3. Bangia, R. K.(2015), Indian Contract Act, Allahabad Law Agency.
- 4. Consumer Protection Act, 1986(Bare Act),2015 Professional Book Publishers.
- 5. Contract Act, 1872 (Bare Act), 2016, Universal Law Publishing
- 6. Diwan Paras (2014), Indian contract Act, Allahabad Law Agency.
- 7. Food Safety and Standard Act 2006, (Bare Act) ,2015, Professional Book Publishers.
- 8. Gulshan, S. S., 2009, Business Law. Excel Books, New Delhi.
- 9. Industrial Dispute Act,1947 (Bare Act), 2016, Universal Law Publishing.
- 10. Kapoor, N. D., 2012, Elements of Company Law. Jain Book Agency, New Delhi.
- 11. Kuchhal, M.C. and Kuchhal, V., 2013, Business Legislation for Management. Vikas Publishing House Pvt. Ltd.
- 12. Negotiable Instruments Act, 1881 (Bare Act), 2015 Universal Law Publishing.
- 13. Sale of Goods Act, 1930 (Bare Act), 2015, Professional Book Publishers.
- 14. Saleem Sheikh & William Rees, (2002), Corporate Governance & Corporate Control, Taylor and Francis, London.
- 15. Singh Avtar, (2017), Contract & Specific Relief, Eastern Book Company; Twelfth edition (2017).
- 16. Smith and Keenan's (2002), Company Law, Harlow: Longman.
- 17. The Indian Partnership Act, 1932(Bare Act),2016, universal law publisher.
- 18. Tulsian, P.C. and Tulsian, B., 2015, Business Law. TMH, New Delhi.

INTER-DISCIPLINARY COURSE (For students of other Departments)

Course Code: ABM.527

Course Name: Organizational Behaviour

L	T	P	Cr
2	0	0	2

Learning Outcome:

After completion of this course students will be able to

- 1. Examine individual and group behavior in an organization.
- 2. Evaluate communication, conflict and various management styles, motivational techniques and coordination in the work environment and apply these concepts in the organizational structure.
- 3. Introduced to various organizational structures.

UNIT-I 8 hours

Introduction to OB, A brief introduction to Perception, Learning, Motivation, Value, Attitude and Leadership.

UNIT-II 7 hours

Group Dynamics, Group Development & Cohesiveness, Developing Teams, Intergroup Relations, Power and Influence of group.

UNIT-III 7 hours

Determinants of Organizational Structure, Types of Organizational Structure, Organizational Culture.

UNIT-IV 8 hours

Organisational Learning and Transformation, Organisational Decision Making, Organisational Strategy.

Transaction Modes: Lecture, Tutorial, Seminar, Case study, Case analysis.

Suggested Readings:

- 1. Francis, C., 1993, Organisational Behaviour. Himalaya Publishing House, New Delhi.
- 2. Fred. L., 2004, Organization Behaviour. Tata McGraw Hill: New Delhi.
- 3. Kolb, D,.1991, Organizational Behaviour: Practical Readings for Management, 5th Ed. Englewood Cliffs, PHI, New Jersey.
- 4. Luthans, F., 2002, Organisational Behaviour. Prentice Hall of India, New Delhi.
- 5. Mainiero, L. A. and Tromley, C. L., 1985, Developing Management Skill in OB. PHI New Delhi.
- 6. Moore, M. D., 1985, Inside Organizations: Understanding the Human Dimensions. London, Sage Publ.
- 7. Robbins, S. P. and Vohara, N., 2011, Organisational Behaviour. Pearson Education, New Delhi.

Course Code: ABM.591

Course Name: Rural Immersion Module

L	T	P	Cr
0	0	8	4

Learning Outcome:

After completion of this course students will be able to

- 1. Apply their classroom learning to real-time environment.
- 2. Assess rural environment, rural markets and identify implementation gaps and business opportunities.
- 3. Analyse the agricultural practices adopted by the farmers in the village.
- 4. Determine the functioning of various organizations at the grass root level and how they are helping the village for improvement of their life.

Course Contents:

The rural immersion module has been designed to provide an opportunity to the students to observe the rural lifestyle closely and understand socioeconomic situations from the point of view of rural community. The students will have hands on experience about the farm management practices. During the first semester break (at the end of the first semester and start of second semester), students will have to go to the village/s and spend a fortnight with the farming community. It is expected that the students shall get exposure to various rural and agricultural practices adopted by the farmers in the village, Gram Panchayat, Cooperative Societies, NGO's, etc., The expenditure incurred during the rural immersion module will be borne by the students themselves. The students will have to submit and present a report about their learning in the village/s.

Transaction Modes: Case study, Case analysis, Brain storming, Group discussion, Project method

Evaluation Criteria: After the successful completion of the Rural Immersion Module, the student has to make a presentation in the department and the result will be evaluated as satisfactory/unsatisfactory.

Continuous Assessment : 50 Marks

(Attendance - 20, Reporting to course

Coordinator - 10, Field Visits - 10),

Presentation skills :10 Marks
Response to queries :10 Marks
Report :30 Marks

Semester-III

Course Code: ABM.551

Course Name: Operations Research

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of this course students will be able to

- 1. Apply problem solving and decision making through the use of various mathematical tools and set day to day activities in the organization.
- 2. Importance of various programming methods and their applications.
- 3. Demonstrate learning simulation techniques to study the problems and settingup new models.

UNIT – I 15 hours

Basic concepts of Operations Research (OR), Areas of Application, Decision making using quantitative tools and techniques

UNIT – II 15 hours

Linear programming (LPP) and their applications, Structure and formulations, Graphical method, Simplex method; Transportation;

UNIT – III 15 hours

Theory of Games, Two-person-zero-sum games, Pure strategies, Mixed strategies, Dominance, Queuing Theory, Basic model and characteristics, Solution and applications

UNIT – IV 15 hours

Replacement models, Theory and applications, Simulation, Monte Carlo simulation models; Model formulation and decision support using software

Transaction Modes: Lecture, Tutorial, Seminar, Problem solving, Case study, Case analysis.

Suggested Readings:

- 1. Hillier, L., 2005, Operations Research: Concepts & Cases. Tata McGraw Hill, New Delhi.
- 2. Kothari, C. R., 1994, An Introduction to Operations Research. Vikas Publishing House, New Delhi.
- 3. Shenoy, G.V., 2009, Operations Research for Management. New Age Publishers: New Delhi.
- 4. Taha, H. A., 2006, Operations Research- an Introduction. Prentice Hall of India, New Delhi.
- 5. Vohra, N.D., 2009, Quantitative Techniques in Management. Tata McGraw Hill, New Delhi.

Course Code: ABM.552

Course Name: Strategic Management

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of this course students will be able to

- 1. Implement of the goals of the organization, assessments of the resources and environment.
- 2. Identify the objectives of the organization and focusing them for the long term.
- 3. Introduce various theories of analysis of the industry and environment to make decisions in an organization.
- 4. Evaluation of the techniques and controlling it in an effective manner for the welfare of the organization.

UNIT I 15 hours

Basic concepts of strategic management- phases and benefits of strategic management, impact of globalization on strategic management, theories of

organizational adaptation, basic model of strategic management. Corporate governance and social responsibility. Environmental scanning and industry analysis-analysis of task environment, Porter's approach to industry analysis, hyper-competition. Case studies.

UNIT II 15 hours

Internal scanning-organizational analysis. Strategy formulation - situation analysis and business strategy including Porter's competitive strategies, cooperative strategies. Corporate strategy- directional strategies including growth, stability and retrenchment strategies, portfolio analysis, corporate parenting. Case studies

UNIT III 15 hours

Functional strategy and strategic choice- core competencies, sourcing decisions, marketing, financial, operations and R&D strategy. Strategy implementation and control- developing organization structure, staffing and directing, use of nonfinancial measures for strategy implementation and control, balanced scorecard approach. Case Studies

UNIT IV 15 hours

Evaluation and control. Strategic issues in entrepreneurial ventures and small businesses. Strategic issues in not-for-profit organizations. Case Studies

Transaction Modes: Lecture, Demonstration, Tutorial, Seminar, Problem solving, Case study, Case analysis, Brain storming.

- 1. David, Fred R. and David, Forest R., 2017, Strategic management: Concepts and cases, Pearson Education, New Delhi.
- 2. Thompson Jr., A. A., Peteraf, M. and Gamble, J. E., 2015, Crafting and Executing Strategy. McGraw Hill, Irwin.
- 3. Gluek, W. F., 2005, Strategic management and Business Policy. New Delhi, Tata McGraw Hills
- 4. Kazmi, A., 2002, Business Policy and Strategic Management. Tata Mcgraw Hill, New Delhi.
- 5. Porter, M. E., 2008, Competitive strategy: Techniques for analyzing industries and competitors. Simon and Schuster.
- 6. Shrinivasan, R., 2012, Strategic Management: Indian Context. PHI
- 7. Stead, J. G. and Stead, E. W., 2014, Sustainable Strategic Management. Routledge Taylor & Francis Group.
- 8. Wheelen, T.L. and Hunger, J.D., 2003, Strategic Management and Business Policy. Pearson Education, (LPE), New Delhi.

Course Code: ABM.553

Course Name: Agricultural Marketing Management

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of this course students will be able to

- 1. Assess agricultural marketing, pricing, packaging, and development of Agri products and services.
- 2. Categories agro industry and gives the depth knowledge of making the decisions.
- 3. Evaluate various alternatives at managerial roles in the industrial and corporate sector.
- 4. Elaborate various methods of value addition and its importance for Agri commodities.

UNIT I 15 hours

Nature and scope of Agricultural Marketing, New Role of Agricultural Marketing, Differences in Marketing of Agricultural and Manufactured Goods, Markets and Markets Structure in Agriculture, Agricultural Marketing and Development, Producer's Surplus of Agricultural Commodities, Meaning and Types of Producer's Surplus, Commercialization of Indian Agriculture, Scientific Marketing of Farm Products.

UNIT II 15 hours

Meaning and Classification of Marketing Functions, Packaging, Transportation, Grading and Standardization, Storage and Warehousing, Processing and Value Addition, Methods of Buying and Selling in Agricultural Commodities, Price Discovery and Price Determination, Genesis of Agricultural Market Intelligence System in India, Market Information in Agriculture, Information Technology (IT) Applications in Agricultural Marketing.

UNIT III 15 hours

Financing for Marketing, Speculation and Hedging, Commodity Futures Trading, Marketing Infrastructure, Different Marketing Agencies, Institutions and Channels in Agricultural Marketing, Contract Farming, Organized and Unorganized food retail sector, Supply Chain Management in Agriculture, Eretailing, Organic Farming & Sustainable Agriculture

UNIT IV 15 hours

Forms of Government Intervention in Agricultural Marketing System, Regulation of Agricultural Marketing, State Trading, e-NAM, Food Corporation of India (FCI), Buffer Stocking, Procurement and Distribution of Foodgrains, Quality Control in Agricultural Products, Agricultural Marketing Reforms Market Integration, Efficiency, Costs, Margins and Price Spread.

Transaction Modes: Lecture, Seminar, Case study, Case analysis, Brain storming, Field visit.

Suggested Readings

- 1. Acharya, S. S. and Agarwal, N. L., 2011, Agricultural Marketing in India. 4th Ed. Oxford and IBH.
- 2. Kohls, R. L.andUhj, J. N., 2005, Marketing of Agricultural Products. 9th Ed. Prentice Hall.
- 3. Kotler, P., 2002, Marketing Management Analysis, Planning, Implementation and Control. Pearson Edu.
- 4. Krishnamacharyulu, C.andRamakrishan, L., 2002, Rural Marketing. Pearson Edu.
- 5. Ramaswamy, V. S. and Nanakumari, S., 2002, Marketing Management. 2nd Ed. Mac Millan India.

Course Code: ABM.521

Course Name: Business Research Methods

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of the course the students will be able to

- 1. Classify research activities in a more organized and systematic manner.
- 2. Demonstrate various business research standards.
- 3. Analyse guidelines for presenting different data into various forms.
- 4. Apply all the appropriate sequential methods which will help them in preparing research reports for academic and industrial purposes.

UNIT I 15 hours

Introduction, Meaning of research; Types of research- Exploratory research, Conclusive research; The process of research; Research applications in social and business sciences; Features of a Good research study. Research Problem and Formulation of Research Hypotheses; Defining the Research problem; Management Decision Problem vs Management Research Problem; Problem identification process; Components of the research problem; Formulating the research hypothesis- Types of Research hypothesis; Writing a research proposal- Contents of a research proposal and types of research proposals.

UNIT II 15 hours

Research design; Nature and Classification of Research Designs; Exploratory Research Designs: Secondary Resource analysis, Case study Method, Expert opinion survey, Focus group discussions; Descriptive Research Designs: Cross-sectional studies and Longitudinal studies; Experimental Designs, Errors affecting Research Design, Classification of data; primary & secondary data; Data collection methods; Observation method, Focus Group Discussion, Personal Interview method

UNIT III 15 hours

Measurement and Scaling; Nominal, Ordinal, Ratio/Interval scale; Single item vs Multiple Item scale, Comparative vs Non-Comparative scales, Measurement

Error, Criteria for Good Measurement, Questionnaire Design, Data Processing: Data Editing- Field Editing, Centralized in house editing; Coding- Coding Closed ended structured Questions, Coding open ended structured Questions; Classification and Tabulation of Data, Testing the hypothesis, Univariate and Bivariate Analysis of Data.

UNIT IV 15 hours

Analysis of Variance: Completely randomized design in a one-way ANOVA; Randomized block design in two way ANOVA; Factor Analysis, Discriminant Analysis, MANOVA, Research Report Writing, Types of research reports – Brief reports and Detailed reports; Report writing: Structure of the research report-Preliminary section, Main report, Interpretations of Results and Suggested Recommendations; Report writing, Formulation rules for writing the report: Guidelines for presenting tabular data, Guidelines for visual Representations, Research Ethics.

Transaction Modes: Lecture, Seminar, Tutorial, Problem solving, Brain storming

Suggested Readings:

- 1. Anderson, 2009, Quantitative Methods in Business. Thomson Learning, Bombay.
- 2. Bhardwaj, R. S., 2000, Business Statistics. Excel Books.
- 3. Hooda. R. P., 2003, Statistics for Business and Economics, McMillan India Ltd.
- 4. Kothari C.R., 2007, Quantitative Techniques. Vikas Publishing House, New Delhi.
- 5. Levin, R.I. and Rubin, D.S., 2008, Statistics for Business. Prentice Hall of India, New Delhi.

Course Code: ABM.592

Course Name: Summer Internship

L	T	P	Cr
0	0	12	6

Learning Outcome:

After completion of this course students will be able to

- 1. Get an opportunity to work in the industry/corporate to showcase their management knowledge in application in the real situations of the organisation.
- 2. Support to develop and refine skills, network with professionals in the field, gain confidence and gain valuable work experience.
- 3. Create understanding of how the organizations work, what are roles and responsibilities of various people in the organization, challenges in the organization, to do a project in real time situation.
- 4. Develop insight into what a future career are available in this stream.

Course Contents:

After the end of the first year, the summer break is designed for the reputed Agribusiness companies to visit Central University of Punjab for absorbing students for summer projects up to 6-8 weeks duration. However, if the student identifies his/her own corporate links and expresses willingness to undergo summer internship in that organization, then he/she can proceed with approval of the competent authority. Most of the projects are focused on critical problems related to future business strategies of the companies. The students will have to submit and present the Summer Internship Report. Besides that every year students will be subjected to Industrial Visits/exposures to the business concerns operating in Agri-Business.

Transaction Modes: Project method, Seminar, Field visit

Evaluation Criteria

S. No.	Criteria	Maximum Marks
1	Continuous assessment	40
2	Understanding of objectives of project	10
3	Interpretation and analysis	20
4	Presentation and communication skills	15
5	Response to queries	15
	Total	100

Result: Satisfactory/Unsatisfactory.

Course Code: ABM.543 Course Name: Seminar I

L	T	P	Cr
0	0	0	1

Learning Outcome:

After completion of the course the students will be able to

- 1. Demonstrate them, in building communication skills, body language skills, and presentation techniques.
- 2. Apply brainstorming about the relevant topics and deliver the information to the audience.

Course Contents:

- The course coordinator should make the students learn how to prepare seminar report as well as seminar presentations on a given topic.
- The preparation of seminar report on a given topic should be made referring to the literature available in the form of text/reference books, journals, periodicals, magazines, newspaper articles, and web resources.
- The students should be encouraged to visit the library as well as computer centre of the University for preparing seminar reports and its power point presentation.

- As far as possible the topic of the seminar should relate to current developments in the field.
- The seminar report and its presentation should be evaluated by a duly constituted Centre level committee.

Transaction Modes: Presentation and Report submission.

Evaluation:

Seminars shall be evaluated by continuous and presentation assessment as detailed below:

Continuous Assessment : 50 marks

Assessment at presentation

Report : 10 marks
Contents : 10 marks
Presentation skills : 10 marks
Innovation in idea : 10 marks
Responses to queries : 10 marks

Value Added Course

Course Code: FST.504

Course Title: Nutrition and Specialty Foods

L	T	P	Cr
1	0	0	1

Total Hours - 15

Learning Outcome:

The course completion will make students:

- To explain terms important in nutrition science
- To compare various constituents of foods for nutritional properties.
- To compare therapeutic and speciality foods.
- To formulate and recommend diets for reducing the risk of chronic diseases.

Unit I 4 Hours

Introduction: Definitions (food, diet, nutrients, nutrition, adequate/good nutrition, nutritional status, malnutrition, nutritional care, health, nutraceuticals, functional foods and dietary supplements); Functions of food; Food types and groups; Concept of balanced diet

Unit II 4 Hours

Nutrition: Nutritional requirements during life cycle: Nutritional requirements and RDA for infants, school children, adolescents, pregnant and lactating mother and elderly people;

Alcoholism and nutrition: Nutritional problem among alcoholics.

Unit III 3 Hours

Therapeutic nutrition: Foods and diets recommended and restricted in blood, circulatory and cardiac diseases, diabetes and obesity.

Introduction to speciality foods: Specialty foods for gluten and lactose intolerants, heart patients and obese people and their potential in India viz a viz developed world

Unit IV 4 Hours

Disorders & Diseases: Types of lactose intolerance; Symptoms; Causes; Prevalence; Approaches for preparation of low lactose and lactose-free milk products-Probiotic and non-probiotic techniques; coeliac disease

Transactional Modes:

Mode of transaction shall be Lecture, presentation, Lecture-cumdemonstration, Seminar, discussion etc.

- C Galanakis, Nutraceutical and Functional Food Components: Effects of Innovative Processing Techniques. Academic Press (2017).
- EC Robert, Handbook of Nutraceuticals and Functional Foods. CRC Press (2006).
- G Subbulakshmi, *Functional Foods and Nutrition*, Daya Publishing House (2014).
- GR Gibson and CM Williams, Functional Foods: Concept to Product. Woodhead Publishing (2000).
- H Dominguez Functional Ingredients from Algae for Foods and Nutraceuticals. Woodhead Publishing (2013).
- J Boye, Nutraceutical and Functional Food Processing Technology. Wiley Blackwell (2015).
- J Gilbert, *Bioactive Compounds in Foods*. Wiley India (2014).
- J Shi, Functional Food Ingredients and Nutraceuticals: Processing Technologies. CRC Press (2006).
- M Saarela, Functional Foods: Concept to Product. Woodhead Publishing (2014).
- M. Swaminathan, Essentials of Food and Nutrition, Volumes 1-2. Ganesh Publisher (1974).
- NN Potter, Food Science. CBS Publishers (2007).
- RR Watson, Fruits Vegetables and Herbs: Bioactive Foods in Health Promotion. Academic Press, (2016).
- S Riar et al., Functional Foods and Nutraceuticals: Sources and Their Developmental Techniques. New India publishing agency (2015).

- Subbulakshmi S and Subhadra M, *Nutrition in Traditional Therapeutic Foods*. Daya Publishing House (2015).
- V Vaclavik and CW Elizabeth, Essentials of Food Science. Springer (2014).
- Y Zhao, Specialty Foods: Processing Technology, Quality and Safety. CRC Press (2012).

Semester - IV

Course Code: ABM.528

Course Name: Project Management and Agripreneurship

Development

L T P Cr 4 0 0 4

Learning Outcome:

After completion of this course students will be able to

- 1. Evaluate the project activities such as project planning, scheduling, executing etc.
- 2. Demonstrate the project and completing within the specified time in any organization for academic and industrial projects.
- 3. Develop evaluation techniques for projects.
- 4. Analyse the concept of Agripreneurship.
- 5. Apply innovations and new dimensions to enhance the scope of business and employment opportunities in agriculture sector.

Unit I 15 hours

Concept, Characteristics of project, Meaning of project management, Project life cycle and its classification, Project management and Project selection, Project feasibility- Market, Technical, Financial and Economic feasibility, Social cost benefit analysis, Risk management.

Unit II 15 hours

Network methods: Meaning, Network analysis, Critical Path Method (CPM), Programme Evaluation and Review Technique (PERT), Project scheduling and planning, Project Financial Appraisal Methods- Net present values, Internal Rate of Returns, Benefit-cost ratio, Payback period, Project implementation, Project control and information system.

Unit III 15 hours

Agripreneurship: Concept, Characteristics; Theories of Entrepreneurship Development; Traits of an Entrepreneur; Classification of Entrepreneurs; Women Entrepreneurship; Barriers to Enterprise; Social Entrepreneurship; Agripreneurship Development in India; Enterprise Resource Management.

Unit IV 15 hours

Government policies for entrepreneurship development; Labour laws for entrepreneurship establishment; Steps in product launch; Success stories in Agri-business; Information and Communication Technology (ICT) in entrepreneurship Development; Business Plan; Entrepreneurship Development in India: Current Challenges and Future Prospects;

Transaction Modes: Lecture, Demonstration, Seminar, Case study, Case analysis, Brain storming.

Suggested Readings:

- 1. Ansuman Sahoo, 2016, Entrepreneurship: Problems and Prospects, S. K. Book Agency, New Delhi.
- 2. Baishnab Padhee, 2016, Handbook of Entrepreneurship Development and Management, Kanishka Publishers, Distributors, New Delhi.
- 3. Dipak D., Basavaprabhu, J. and Gangadharappa, N. R., 2016, Entrepreneurship in Agricultural Development. Daya Publishing House A Division of Astral International Pvt. Ltd., New Delhi.
- 4. Harold Kerzner, 2017, Project Management: A Systems Approach to Planning, Scheduling and Controlling, Wiley India Pvt. Ltd. New Delhi.
- 5. Mahesh Kumar, 2017, Entrepreneurship in Agricultural Development, Book Enclave, Jaipur, India.
- 6. Mantel, Maerdith, Shafer, Sutton and Gopalan, M. R., 2016, Project Management: Core Textbook, Wiley India Pvt. Ltd. New Delhi.
- 7. Russ, J. M. and Dragan Z. M., 2016, Project Management Tool Box, Wiley India Pvt. Ltd. New Delhi.
- 8. Shilpi Jauhari, Chaturvedi, S. K., 2014, Project Management, Himalaya Publishing House, Mumbai.

INDUSTRY ORIENTED ELECTIVE COURSES

Course Code: ABM.575

Course Name: Food Retail Management

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of this course students will be able to

- 1. Analyse various concerns of retail business, retail marketing and operations.
- 2. Evaluate the sale of the businesses and maintaining good customer relationship.
- 3. Develop an understanding about retail and food retail and their pros and consequences.
- 4. Apply different transportation modes, advertisements etc.

UNIT – I 11 hours

Introduction-Meaning, Evolution of Retail industry in India, Role of retailing, Trends in Retailing, Emergence of organized retailing, Classification of Retail Industry, Different retail formats, E-tailing, Understanding food preference of Indian Consumer, Food consumption and Expenditure pattern, Demographic and Psychographic factors affecting Food Pattern of Indian Consumer.

UNIT – II 12 hours

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, value chain and value additions across the chain in food retail, food service marketing.

UNIT – III 12 hours

4 P's in Food Retail Management, Brand Management in Retailing, Merchandise pricing, Pricing Strategies used in conventional and non-conventional food retailing, Public distribution system, Promotion mix for food retailing, Management of sales promotion and Publicity, Advertisement Strategies for food retailers. Managing Retail Operations, Managing Retailers' Finances, Merchandise buying and handling, Merchandise Pricing, Logistics, procurement of Food products and Handling Transportation of Food Products.

UNIT – IV

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, Category Management, Role of supermarkets

Transaction Modes: Lecture, Seminar, Case study, Case analysis.

Suggested Readings:

- 1. Ogden, J. R. and Ogden, D. T., 2009, Integrated Retail Management. Biztantra.
- 2. Pradhan, S., 2006, Retailing Management 2E, Tata McGraw-Hill Education.
- 3. Singh, Sukhpal, 2011. Fresh food retails in India: Organisation and impacts, Allied publishers pvt. Ltd., New Delhi

Course Code: ABM.576

Course Name: Agricultural Input Marketing

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of this course students will be able to

- 1. Learn the importance of agri inputs, their marketing to support the agri industry by meeting various inputs needs to different organisations and responding to rapid changes.
- 2. Understand the different types of agriculture input and their use.
- 3. Understand the role of government, their policies and other agencies in this sector.
- 4. Understand the various companies which are functioning in the agriinput sector.

UNIT – I 10 hours

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. Marketing channels for different agri- inputs, Competitive marketing strategy and advancement in agricultural marketing, IPRs in agricultural inputs

UNIT – II 11 hours

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 National Seed Corporation and State Seed Corporation, Contemporary Promotional activities by various seed companies, Government policies and schemes regarding seed marketing for various stakeholders, Bio inputs and current scenario, Case studies related to seed marketing in India and abroad.

UNIT – III 12 hours

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, Different government policies and schemes, Contemporary Promotional activities by various fertilizer companies, Case studies pertaining to fertilizer marketing in India and abroad. Plant Protection Chemicals- Production, export/import, consumption, and marketing system – marketing channels

UNIT – IV 12 hours

Farm Machinery- Production, supply, demand, Marketing and distribution channels of farm machines; Agro-industries Corporation and marketing of farm machines / implements/Equipments, Various government policies and

schemes associated with PPCs, Case studies pertaining to PPCs marketing and promotion b public private enterprise in India

Transaction Modes: Lecture, Seminar, Problem solving, Case study, Case analysis.

Suggested Readings:

- 1. Acharya, S. S. and Agarwal, N. L., 2011. Agricultural Marketing in India. 4th Ed. Oxford and IBH.
- 2. Broadway A. C. and Broadway, A. A., 2003, A Text Book of Agri-Business Management. Kalyani.
- 3. Singh Sukhpal, 2004, Rural Marketing- Focus on Agricultural Inputs.Vikas Publ. House.
- 4. Singh, A. K. and Pandey, S., 2005. Rural Marketing. New Age.

Course Code: ABM.577

Course Name: Management of Contract Farming

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of this course students will be able to

- 1. Assess various agreements made between a buyer and farmers and their conditions to produce the agreed quantities.
- 2. Introduce the regulations and formalities to be followed to make contracts.
- 3. Manage a farm through contracts and get the work done through the contract farming.
- 4. Apply management of project and analysing the issues of farmers under the contracts.

UNIT I 10 hours

Concept and Logic of Contract Farming; Contract Farming – Past and Present; Advantages and Problems of Contract Farming - Advantages for farmers, Problems faced by farmers, Advantages for sponsors, Problems faced by sponsors.

UNIT II 12 hours

Key Preconditions for Successful Contract Farming - Profitable market, Physical and Social Environments, Government support, Inventories of preconditions, Price fixation, Quality & Quantity Defaults; Conflict/dispute resolution

UNIT III 12 hours

Types of Contract Farming - Centralized Model, Nucleus Estate Model, Multipartite Model, Informal Model, Intermediary Model; Contracts and their

Specifications - Legal framework, Formula, Format, Specifications, Model contract farming act 2018

UNIT IV 11 hours

Managing the Project - Coordinating production, managing the agronomy, Farmer-management relations; Monitoring Performance - Monitoring quality and yields, Monitoring human resources, Protecting the environment.

Transaction Modes: Lecture, Seminar, Problem solving, Case study, Case analysis, Group discussions.

Suggested Readings

- 1. Deshpande, C. S., 2005, Contract Farming as means of Value Added Agriculture, retrieved from https://www.nabard.org/pdf/OC%2042.pdf
- 2. FAO Agricultural Services Bulletin 145, 2017, Contract farming Partnerships for growth, retrieved from http://www.fao.org/docrep/014/y0937e/y0937e00.pdf
- 3. Rehber, E., 2007, Contract Farming: Theory and Practice, Icfai University Press
- 4. Singh, S., 2005, Contract Farming for Agricultural Development Review of Theory and Practice with Special Reference to India retrieved from https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4 &cad=rja& uact=8&ved=0ahUKEwiKlM-yv8vRAhWmKMAKHU2kCkkQFggvMAM&url=http%3A%2F%2Fwww.esoci alsci
 - ences.org%2FDownload%2FrepecDownload.aspx%3Ffname%3DDocument1111120
 - 05460.7734186.pdf%26fcategory%3DArticles%26AId%3D246%26fref%3D repec&u sg=AFQjCNFaadlwGleBnDJOf0zIN-STW0YEBg&sig2=fwSdfc1BuH4i-2taWCmAtQ&bvm=bv.144224172,d.c2I
- 5. Singh, S., 2005, Political Economy of Contract Farming in India, Allied Pub. Pvt. Ltd.

Course Code: ABM.578

Course Name: Agri-Produce Post Harvest Management

L	T	P	Cr
4	0	0	4

Learning Outcome:

After completion of this course students will be able to

- 1. Utilize technologies and practices which are undergone by farmers, companies, to handle the crop after the harvesting.
- 2. Apply laws which regulate these activities.
- 3. Assess problems and overcoming of these problems in the postharvest management.
- 4. Classify different packaging methods based on the nature of product.

UNIT I 11 hours

Importance and scope of post-harvest management of major cereals, pulses, oilseeds, fruits and vegetables in Indian Economy; Production and utilization of major cereals, pulses, oilseeds, fruits and vegetables; Present status of food industry in India and emerging scenario; Factors affecting post-harvest losses;

UNIT II 12 hours

Processing mills, handling and storage of by-products and their utilization. Storage of milled products; Harvesting and handling of important fruits and vegetables, Field heat of fruits and vegetables, washing, pre-cooling, sorting and grading at farm level, preservation of fruits and vegetables, blanching, commercial canning of fruits and vegetables, minimal processing of fruits and vegetables.

UNIT III 10 hours

Packaging of processed products; Cold storage of fruits and vegetables, controlled atmosphere packaging of fruits and vegetables, Dehydration of fruits and vegetables;

UNIT IV 12 hours

Problems in marketing of processed foods, Government Policy; BIS standards for various processed products, Quality standards for domestic and international trade. FSS Act, FPO, Visit to related agro-processing industry

Transaction Modes: Lecture, Seminar, Problem solving, Case study, Case analysis.

Suggested Readings

- 1. Chakraverty, A., 1995, Post-harvest Technology of Cereals, Pulses and Oilseeds, Oxford and IBH.
- 2. Morris, L., 1983, Post-harvest Physiology and Crop Preservation, Plenum Press.
- 3. Srivastava, R. P. and Kumar, S., 1994, Fruit and Vegetable Preservation, Principles and Practices, International Book Distr.
- 4. Thompson, A. K., 1996, Post-Harvest Technology of Fruits and Vegetables, Blackwell.
- 5. Verma, L. R. and Joshi, V. K., 2000, Post-Harvest Technology of Fruits and Vegetables, Vols. I-II. Indus Publ.

Course Code: ABM.573

Course Name: Recent Trends in Agribusiness Management -I

L	T	P	Cr
0	2	0	2

Evaluation Criteria:

Mock test schedule will be shared and test will be conducted accordingly. Four mock tests will be conducted in the semester. Each test shall comprise of 50 MCQs of 25% weightage from the syllabus of the competitive examination.

Learning Outcome:

After completion of the course the students will be able to

- 1. Prepare for competitive exams such as UGC NET, ICAR NET, ASRB scientist, etc.
- 2. Apply their skills and appear for the exam with full preparation and confidence.
- 3. Formulate new changes in the field of agri business management.

UNIT I 8 hours

Importance of agriculture finance; rural credit structure; demand, supply, sources and forms; estimation of credit requirement; credit appraisal – 3Rs and 3 Cs of credit; reforms in agricultural credit policy; innovations in agricultural financing; principles of agricultural financial management; Successes and failures of rural finance co-operative sector in India

UNIT II 7 hours

Farm management problems and decisions; Farm management principles; Farm planning and budgeting; risk and uncertainty in Farming; Overview of management of poultry & hatchery, fishery, livestock, feed, seed production, agrochemicals, farm power and machinery, veterinary hospital; floriculture and landscaping businesses

UNIT III 8 hours

WTO and its implications for Indian economy in general and agriculture sector in particular; strategy and leadership; total quality management; creating competitive advantage; linkages among subsectors of the agribusiness sector; Trends in production, processing, marketing, exports, policy controls and regulations relevant to agro industries

UNIT IV 7 hours

Types of research in management; Use of determinants and matrices in business decisions; Frequency distribution, Measures of central tendency; Measures of variation; Skewness and Kurtosis; correlation and regression; Discriminant and dummy variable analysis; Index numbers; Hypothesis testing; Statistical quality control

Transaction Modes: Lecture, Seminar, Problem solving, Case study, Case analysis.

Course Code: ABM.574

Course Name: Recent Trends in Agribusiness Management -II

L	T	P	Cr
0	2	0	2

Evaluation Criteria:

Mock test schedule will be shared and test will be conducted accordingly. Four mock tests will be conducted in the semester. Each test shall comprise of 50 MCQs of 25% weightage from the syllabus of the competitive examination.

Learning Outcome:

After completion of the course the students will be able to

- 1. Prepare for competitive exams such as UGC NET, ICAR NET, ASRB scientist, etc.
- 2. Apply their skills and appear for the exam with full preparation and confidence.
- 3. Formulate new changes in the field of agri business management.

UNIT I 8 hours

Ethics and Management system, Ethical issues and analysis in Management; Value based organizations; Personal framework for ethical choices; Ethical pressure on individual in organizations; Gender issues; Environmental ethics; Corporate governance and ethics; labour welfare and social security measures; ecological concerns and marketing ethics

UNIT II 7 hours

Concept of small businesses; Government policy for promotion of small and tiny enterprise; process of business opportunity identification; Detailed business plan preparation; Managing small enterprise; Planning for growth; sickness in small enterprise; rehabilitation of sick enterprise; New issues in marketing; structuring and managing marketing organisations

Unit III 8 hours

Use of computers in Managerial applications; Technology issues and Data processing in organizations; Information systems; MIS and Decision Making; system analysis and design; Trends in information technology; Internet and Internet based applications; Use of internet as a medium of marketing; Managerial issues in reaching consumers/ organization through internet

Unit IV 7 hours

Recent trends in international marketing and agribusiness; International marketing logistics; International logistical structures; International investment; International credit rating Agencies and implications of their ratings; Technology monitoring; Emerging opportunities for global business; Competitive advantage of nations

Transaction Modes: Lecture, Seminar, Problem solving, Case study, Case analysis.

Learning Outcome:

- 1. This course will help students to prepare for competitive exams such as UGC NET, ICAR NET, ASRB scientist, etc.
- 2. It will help students to polish up their skills and appear for the exam with full preparation and confidence.
- 3. Through this course students are introduced to new changes in the field of agri business management.
- 4. Use of computer and technology in the managerial operations and decision making.

Course Code: ABM.544
Course Name: Seminar II

L	T	P	Cr
0	0	0	1

Learning Outcome:

After completion of the course the students will be able to

- 1. Demonstrate themselves, in building communication skills, body language skills, and presentation techniques.
- 2. Apply brainstorming about the relevant topics and deliver the information to the audience.

Course Contents:

- The course coordinator should make the students learn how to prepare seminar report as well as seminar presentations on a given topic.
- The preparation of seminar report on a given topic should be made referring to the literature available in the form of text/reference books, journals, periodicals, magazines, newspaper articles, and web resources.
- The students should be encouraged to visit the library as well as computer centre of the University for preparing seminar reports and its power point presentation.
- As far as possible the topic of the seminar should relate to current developments in the field.
- The seminar report and its presentation should be evaluated by a duly constituted Centre level committee.

Transaction Modes: Presentation and Report submission.

Evaluation:

Seminars shall be evaluated by continuous and presentation assessment as

detailed below:

Continuous Assessment : 50 marks

Assessment at presentation

Report : 10 marks
Contents : 10 marks
Presentation skills : 10 marks
Innovation in idea : 10 marks
Responses to queries : 10 marks

Course Code: ABM.599

Course Name: Project Report

L	T	P	Cr
0	0	12	6

Learning Outcome:

After completion of the course the students will be able to

- 1. Conduct the research and the use of the research concepts in the preparation of project report.
- 2. Assess the best decisions among Agri-business problem solving.
- 3. Allow to apply themselves, authoritatively and fluently in writing.
- 4. Apply all their course learning in the project work.
- 5. Make use of guidance to carry out the research activities.

Course Contents:

Project work during the programme shall be evaluated as per the University rules for Masters' Degree Programmes.

Transaction Modes: Project method and seminar

Value Added Course

Course Code: FST.504

Course Title: Nutrition and Specialty Foods

Total Hours - 15

L	T	P	Cr
1	0	0	1

Learning Outcome:

The course completion will make students:

- To explain terms important in nutrition science
- To compare various constituents of foods for nutritional properties.
- To compare therapeutic and speciality foods.
- To formulate and recommend diets for reducing the risk of chronic diseases.

Unit I 4 Hours

Introduction: Definitions (food, diet, nutrients, nutrition, adequate/good nutrition, nutritional status, malnutrition, nutritional care, health, nutraceuticals, functional foods and dietary supplements); Functions of food; Food types and groups; Concept of balanced diet

Unit II 4 Hours

Nutrition: Nutritional requirements during life cycle: Nutritional requirements and RDA for infants, school children, adolescents, pregnant and lactating mother and elderly people;

Alcoholism and nutrition: Nutritional problem among alcoholics.

Unit III 3 Hours

Therapeutic nutrition: Foods and diets recommended and restricted in blood, circulatory and cardiac diseases, diabetes and obesity.

Introduction to speciality foods: Specialty foods for gluten and lactose intolerants, heart patients and obese people and their potential in India viz a viz developed world

Unit IV 4 Hours

Disorders & Diseases: Types of lactose intolerance; Symptoms; Causes; Prevalence; Approaches for preparation of low lactose and lactose-free milk products-Probiotic and non-probiotic techniques; coeliac disease

Transactional Modes:

Mode of transaction shall be Lecture, presentation, Lecture-cumdemonstration, Seminar, discussion etc.

Suggested readings

- C Galanakis, Nutraceutical and Functional Food Components: Effects of Innovative Processing Techniques. Academic Press (2017).
- EC Robert, Handbook of Nutraceuticals and Functional Foods. CRC Press (2006).
- G Subbulakshmi, Functional Foods and Nutrition, Daya Publishing House (2014).
- GR Gibson and CM Williams, Functional Foods: Concept to Product. Woodhead Publishing (2000).
- H Dominguez Functional Ingredients from Algae for Foods and Nutraceuticals. Woodhead Publishing (2013).
- J Boye, Nutraceutical and Functional Food Processing Technology. Wiley Blackwell (2015).
- J Gilbert, Bioactive Compounds in Foods. Wiley India (2014).
- J Shi, Functional Food Ingredients and Nutraceuticals: Processing Technologies. CRC Press (2006).

- M Saarela, Functional Foods: Concept to Product. Woodhead Publishing (2014).
- M. Swaminathan, Essentials of Food and Nutrition, Volumes 1-2. Ganesh Publisher (1974).
- NN Potter, Food Science. CBS Publishers (2007).
- RR Watson, Fruits Vegetables and Herbs: Bioactive Foods in Health Promotion. Academic Press, (2016).
- S Riar et al., Functional Foods and Nutraceuticals: Sources and Their Developmental Techniques. New India publishing agency (2015).
- Subbulakshmi S and Subhadra M, *Nutrition in Traditional Therapeutic Foods*. Daya Publishing House (2015).
- V Vaclavik and CW Elizabeth, Essentials of Food Science. Springer (2014).
- Y Zhao, Specialty Foods: Processing Technology, Quality and Safety. CRC Press (2012).

