



Integral University, Lucknow
Integral Institute of Agricultural Science and Technology
Evaluation Scheme of Postgraduate program
w.e.f. Session 2020-21

MBA Agribusiness Management

Semester – III

| Course Code | Course Title | Periods per week | | | Evaluation Scheme Theory Mid sem | | | Evaluation Scheme Practical Mid sem | | | End Sem Practical Exam | Sub Total (Sessional + Practical Exam) | End Sem Theory Exam | Subject total | Credit | Total Credit Points | Attributes | | | | | | |
|-------------|-----------------------------------------------------|------------------|---|-----------|----------------------------------|----|-------|-------------------------------------|----|-------|------------------------|----------------------------------------|---------------------|---------------|--------|---------------------|---------------|------------------|-------------------|-----------------|------------------------------|-------------|---------------------|
| | | L | T | P | CT | TA | Total | CT | TA | Total | | | | | | | Employability | Entrepreneurship | Skill Development | Gender Equality | Environment & Sustainability | Human Value | Professional Ethics |
| AB518 | Research Methodology in Business Management | 2 | 0 | 2 | 20 | 10 | 30 | - | - | - | 20 | 20 | 50 | 100 | 2:0:1 | 3 | √ | √ | √ | | | | √ |
| AB519 | Project Management and Entrepreneurship Development | 2 | 0 | 0 | 20 | 10 | 30 | - | - | - | - | - | 70 | 100 | 2:0:0 | 2 | √ | √ | √ | | √ | | √ |
| BE561 | Food Technology & Processing Management | 2 | 0 | 0 | 20 | 10 | 30 | - | - | - | - | - | 70 | 100 | 2:0:0 | 2 | √ | √ | √ | | √ | | |
| AG561 | Management of Agro-chemical Industry | 2 | 0 | 0 | 20 | 10 | 30 | - | - | - | - | - | 70 | 100 | 2:0:0 | 2 | √ | √ | √ | | √ | | √ |
| AB522 | Seed Production Technology and Management | 2 | 0 | 0 | 20 | 10 | 30 | - | - | - | - | - | 70 | 100 | 2:0:0 | 2 | √ | √ | √ | | √ | | √ |
| AB523 | Management of Agricultural Input Marketing | 2 | 0 | 0 | 20 | 10 | 30 | - | - | - | - | - | 70 | 100 | 2:0:0 | 2 | √ | √ | √ | | √ | | √ |
| AB524 | Agri-supply Chain Management | 2 | 0 | 0 | 20 | 10 | 30 | - | - | - | - | - | 70 | 100 | 2:0:0 | 2 | √ | √ | √ | | √ | | √ |
| PGS501 | Library and Information Services | 0 | 0 | 2 | - | - | - | - | 20 | 5 | 25 | 75 | - | 100 | 0:0:1 | 1* | | | √ | | | | √ |
| | Total | 14 | | 02 | | | | | | | | | | | | 15+1* | | | | | | | |

* Non-Credit Courses

**MBA Agribusiness Management
SEMESTER-III**

Course Title: Research Methodology in Business Management

Course Code: AB518

w.e.f. Session 2020-21

Credit

3(2+1)

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, multi-dimensional analysis etc, Report writing: Types of report, essentials and contents of good report writing.

Suggested Readings:

Cooper DR & Schindler PS. 2006. *Marketing Research Concepts and Cases*. Tata McGraw Hill.
Green PE, Tull DS & Albaum G. 1998. *Research for Marketing Decisions*. Prentice Hall of India.

Wilkinson & Bhandarker 1989. *Research Methods in Social Sciences*. Himalaya Publ. House.

**MBA Agribusiness Management
SEMESTER-III**

Course Title: Project Management and Entrepreneurship Development

Course Code: AB519

w.e.f. Session 2020-21

**Credit
2(2+0)**

Objective

The objective of this course is to expose the learner to the fields of project management and entrepreneurship development. Focus will be to train the students to develop new projects and encouraging them to start their own ventures.

Contents

UNIT I

Concept, characteristics of projects, types of projects, project identification, and Project's life cycle.

UNIT II

Project feasibility- market feasibility, technical feasibility, financial feasibility, and economic feasibility, social cost-benefit analysis, project risk analysis.

UNIT III

Network Methods: Meaning, Network Analysis, Requirements for Network Analysis, Critical Path Method (CPM), Programme Evaluation and Review Technique (PERT), Project scheduling and resource allocation.

UNIT IV

Financial appraisal/evaluation techniques- discounted/non-discounted cash flows; Net present values, profitability index, Internal rate of returns; Cost benefits ratio; Accounting rate of return, Pay back period, Project implementation; Cost over run, Project control and information system.

UNIT V

Entrepreneurship, Significance of entrepreneurship in economic development qualities of entrepreneur, entrepreneurship development programs and role of various institutions in developing entrepreneurship, life cycles of new business, environmental factors affecting success of a new business, reasons for the failure and visible problems for business, Developing effective business plans, Procedural steps in setting up of an industry.

Suggested Readings:

Chandra P. 2005. *Project Management*. Tata McGraw Hill.

Gopal Krishan P & Nagarajan K. 2005. *Project Management*. New Age.

Hisrich RD & Peters MP. 2002. *Entrepreneurship*. Tata McGraw Hill.

Kaplan JM. 2003. *Patterns of Entrepreneurship*. John Wiley & Sons.

Nandan H. 2007. *Fundamentals of Entrepreneurship Management*. Prentice Hall.

Ramamoorthy VE. 2005. *Textbook of Project Management*. MacMillan.

MBA Agribusiness Management
SEMESTER-III
Course Title: Food Technology & Processing Management
Course Code: BE561
w.e.f. Session 2018-19

Credit
2(2+0)

Objective

The objective of this course is to acquaint the students with different food processing techniques and their management.

Contents

UNIT I

Present status of food industry in India; Organization in food industry; Introduction to operations of food industry; Deteriorative factors and hazards during processing, storage, handling and distribution.

UNIT II

Basic principles of food processing and food preservation by manipulation of parameters and factors and application of energy, radiations, chemicals and biotechnological agents; Packaging of foods.

UNIT III

Analysis of costs in food organization; Risk management; Laws and regulations related to food industry and food production and marketing; Quality management – quality standards, PFA, ISO, etc.

UNIT IV

Case studies on project formulation in various types of food industries – milk and dairy products, cereal milling, oil-seed and pulse milling, sugarcane milling, honey production, baking, confectionery, oil and fat processing, fruits and vegetable storage and handling, processing of fruits and vegetables, egg, poultry, fish and meat handling and processing, etc.

Suggested Readings:

Acharya SS & Aggarwal NL. 2004. *Agricultural Marketing in India*. Oxford & IBH.
Early R. 1995. *Guide to Quality Management Systems for Food Industries*. Blackie.
Potly VH & Mulky MJ. 1993. *Food Processing*. Oxford & IBH.

MBA Agribusiness Management
SEMESTER-III
Course Title: Management of Agro-chemical Industry
Course Code: AG561
w.e.f. Session 2017-18

Credit
2(2+0)

Objective

To familiarize the students with the agrochemicals, their structure, classification and development and also how to manage the agro-chemical industries.

Contents

UNIT I

Agro-chemicals: Definition and classification; Basic knowledge of agrochemicals; role and status of agro-chemical industry in India; Pesticides – Classification and Introduction, knowledge of different pesticides.

UNIT II

Insecticides – Definition and classification based on (a) Mode of Entry (b) Mode of Action and (c) Chemical Structure with example; Insecticidal formulation; preliminary knowledge of mode of action of insecticides; knowledge of plant protection equipments.

UNIT III

Fungicides – Classification and preliminary knowledge of commonly used fungicides; Biomagnifications of pesticides and pesticidal pollution.

UNIT IV

Introductory knowledge about development of agro-chemicals; Insecticidal poisoning, symptoms and treatment; Main features of Insecticide Act.

UNIT V

Directorate of Plant Protection, Quarantine and Storage – A brief account of its organizational set up and functions; IPM Concept – Bio-pesticides – Plant products

Suggested Readings:

Dhaliwal GS, Singh R & Chhillar BS. 2006. *Essentials of Agricultural Entomology*. Kalyani Publishers.

Rajeev K & Mukherjee RC. 1996. *Role of Plant Quarantine in IPM*. Aditya Books.

Hayes WT & Laws ET. 1991. *Hand Book of Pesticides*. Academic Press.

**MBA Agribusiness Management
SEMESTER-III**

Course Title: Seed Production Technology and Management

Course Code: AB522

w.e.f. Session 2020-21

Credit

2(2+0)

Objective

To apprise students regarding principles and efficient management of seed production technology.

Contents

UNIT I

Seed Technology – Role of Seed Technology, its Course Objective and goal, Seed Industry in India, National Seed Corporation – Tarai Seed Development Corporation, State Seed Corporations, National Seed Project and State Farms and their role.

UNIT II

Development and Management of Seed Programmes – Seed Village Concept, Basic Strategy of Seed Production and Planning and Organization of Seed Programme; Types of Seed Programme – Nucleus seed, Breeders seed, Foundation seed and Certified seed etc.

UNIT III

Maintenance of genetic purity – Minimum seed certification standard and Management of breeders & Nucleus seed; Management of seed testing laboratory and research and development.

UNIT IV

Management of seed processing plant, seed storage management; seed packaging and handling.

UNIT V

Seed Marketing; GM Crop seed, IPR, PBR, Patents and related issues and their impact on developing countries; Statutory intervention in the seed industry; Seed legislation and seed law enforcement, Seed act; Orientation and visit to seed production farms, seed processing Units, NSC, RSSC, RSSCA and seed testing laboratories.

Suggested Readings:

Agrawal RL. 1997. *Seed Technology*. Oxford & IBH.

Desai BB, Katecha PM & Salunkhe DK. 1997. *Seed Handbook: Biology, Production, Processing and Storage*. Marcel Dekker.

McDonald MB Jr. & Copeland LO. 1997. *Seed Production: Principles and Practices*. Chapman & Hall.

MBA Agribusiness Management
SEMESTER-III
Course Title: Management of Agricultural Input Marketing
Course Code: AB523
w.e.f. Session 2020-21

Credit
2(2+0)

Objective

The objective of this course is to give the students an understanding of different marketing concept and marketing system in context of agricultural inputs.

Contents

UNIT I

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.

UNIT II

Seed- Importance of seed input; Types of seeds- hybrid, high yielding and quality seeds; Demand and supply of seeds; Seed marketing channels, pricing, export import of seeds; Role of NSC and State Seed Corporation.

UNIT III

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.

UNIT IV

Plant Protection Chemicals- Production, export/import, consumption, marketing system – marketing channels; Electricity/Diesel Oil- marketing and distribution system; pricing of electricity for agriculture use; subsidy on electricity.

UNIT V

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

Suggested Readings:

Singh AK & Pandey S. 2005. *Rural Marketing*. New Age.

Singh Sukhpal 2004. *Rural Marketing- Focus on Agricultural Inputs*. Vikas Publ. House.

Acharya SS & Agarwal NL. 2004. *Agricultural Marketing in India*. 4th Ed. Oxford & IBH.

Broadway AC & Broadway Arif A. 2003. *A Text Book of Agri-Business Management*. Kalyani.

MBA Agribusiness Management
SEMESTER-III
Course Title: Agri-supply Chain Management
Course Code: AB524
w.e.f. Session 2020-21

Credit
2(2+0)

Objective

The course introduces students to the concepts and processes of agricultural supply chain management, framework for structuring supply chain drivers; network designs, demand forecasting, inventory planning, sourcing decisions and IT enablement of supply chain.

Contents

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 and Forecasting; Operations Management in Supply Chain, Basic Principles of Manufacturing 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 (VMI).

UNIT IV

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 V

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.

Suggested Readings

Altekar RV. 2006. *Supply Chain Management: Concepts and Cases*. Prentice Hall of India.
Monczka R, Trent R & Handfield R. 2002. *Purchasing and Supply Chain Management*. Thomson Asia.
van Weele AJ. 2000. *Purchasing and Supply Chain Management Analysis, Planning and Practice*. Vikas Publ. House.

**M.Sc. (Ag.)/MBA Agribusiness Management
SEMESTER-III**

Course Title: Library and Information Services

Course Code: PGS501

w.e.f. Session 2018-19

Credit

1 (0+1)

Objective

To equip the library users with skills to trace information from libraries efficiently, to apprise them of information and knowledge resources, to carry out literature survey, to formulate information search strategies, and to use modern tools (Internet, OPAC, search engines etc.) of information search.

Practical

Introduction to library and its services; Role of libraries in education, research and technology transfer; Classification systems and organization of library; Sources of information- Primary Sources, Secondary Sources and Tertiary Sources; Intricacies of abstracting and indexing services (Science Citation Index, Biological Abstracts, Chemical Abstracts, CABI Abstracts, etc.); Tracing information from reference sources; Literature survey; Citation techniques/Preparation of bibliography; Use of CD-ROM Databases, Online Public Access Catalogue and other computerized library services; Use of Internet including search engines and its resources; e-resources access methods.