DEPARTMENT OF AGRICULTURAL ECONOMICS & BUSINESS MANAGEMENT

COURSE CURRICULUM

(CBCS)

MASTER OF AGRI-BUSINESS MANAGEMENT

FACULTY OF AGRICULTURAL SCIENCES
ALIGARH MUSLIM UNIVERSITY
ALIGARH 202 002
## Department of Agricultural Economics & Business Management
### List of Course Curriculum (CBCS)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>CODE</th>
<th>TITLE OF THE COURSE</th>
<th>Cr</th>
<th>Sessional /Assignment</th>
<th>Mid Semester</th>
<th>End Semester</th>
<th>Max Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I Semester</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Core</td>
<td>AEM-1001 Problems of Indian Agriculture</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Core</td>
<td>AEM-1002 Agricultural &amp; Rural Marketing</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Core</td>
<td>AEM-1003 Foundation of Management</td>
<td>3</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>Core</td>
<td>AEM-1004 Business Environment</td>
<td>2</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>Core</td>
<td>AEM-1005 Managerial Economics-I</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>Core</td>
<td>AEM-1006 Management Accounting</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>7</td>
<td>Core</td>
<td>AEM-2001 Fundamentals of Information Technologies</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>8</td>
<td>Core</td>
<td>AEM-2002 Financial Management</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>9</td>
<td>Core</td>
<td>AEM-2003 Research in Agri business</td>
<td>2</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>10</td>
<td>Core</td>
<td>AEM-2004 Managerial Economics-II</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>11</td>
<td>Core</td>
<td>AEM-2005 Agri Human Resource Development</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>12</td>
<td>Core</td>
<td>AEM-2006 Quantitative Techniques</td>
<td>3</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>13</td>
<td>Core</td>
<td>AEM-2007 Marketing Management</td>
<td>2</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td><strong>II Semester</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Elective</td>
<td>AEM-3001 Agricultural Policy &amp; Planning</td>
<td>2</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>15</td>
<td>Core</td>
<td>AEM-3002 Global Marketing</td>
<td>2</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>16</td>
<td>Elective</td>
<td>AEM-3003 Agricultural and Micro Finance</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>17</td>
<td>Elective</td>
<td>AEM-3004 WTO and Indian Agriculture</td>
<td>2</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>18</td>
<td>Core</td>
<td>AEM-3005 Select Computer Application Packages</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>19</td>
<td>Core</td>
<td>AEM-3006 Agricultural Investment Management</td>
<td>2</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>20</td>
<td>Core</td>
<td>AEM-3011 Consumer Behaviour</td>
<td>2</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>21</td>
<td>Ability Enhancement</td>
<td>AEM-3071 Summer Training Report</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td><strong>III-Semester</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Core</td>
<td>AEM-4001 Agricultural Production Economics</td>
<td>2</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>23</td>
<td>Elective</td>
<td>AEM-4002 Management of Agricultural Cooperatives</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>24</td>
<td>Core</td>
<td>AEM-4003 Strategic Management</td>
<td>3</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>25</td>
<td>Elective</td>
<td>AEM-4004 Theory of Economic Development</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>26</td>
<td>Core</td>
<td>AEM-4005 O.B. &amp; Communication</td>
<td>3</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>27</td>
<td>Core</td>
<td>AEM-4006 Export Import Management</td>
<td>2</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>28</td>
<td>Elective*</td>
<td>AEM-4011 International Trade in Agri Business</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>29</td>
<td>Elective*</td>
<td>AEM-4012 Agricultural Derivatives &amp; Risk Management</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

**Ability Enhancement=2**  **Elective=8**  **Core=10**  **20**

**IV-Semester**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>CODE</th>
<th>TITLE OF THE COURSE</th>
<th>Cr</th>
<th>Sessional /Assignment</th>
<th>Mid Semester</th>
<th>End Semester</th>
<th>Max Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Core</td>
<td>AEM-4001 Agricultural Production Economics</td>
<td>2</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>23</td>
<td>Elective</td>
<td>AEM-4002 Management of Agricultural Cooperatives</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>24</td>
<td>Core</td>
<td>AEM-4003 Strategic Management</td>
<td>3</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>25</td>
<td>Elective</td>
<td>AEM-4004 Theory of Economic Development</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>26</td>
<td>Core</td>
<td>AEM-4005 O.B. &amp; Communication</td>
<td>3</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>27</td>
<td>Core</td>
<td>AEM-4006 Export Import Management</td>
<td>2</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>28</td>
<td>Elective*</td>
<td>AEM-4011 International Trade in Agri Business</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>29</td>
<td>Elective*</td>
<td>AEM-4012 Agricultural Derivatives &amp; Risk Management</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>#</td>
<td>Course Type</td>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Practical</td>
<td>Theory</td>
<td>Lab</td>
</tr>
<tr>
<td>----</td>
<td>---------------</td>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
<td>-----------</td>
<td>--------</td>
<td>-----</td>
</tr>
<tr>
<td>30</td>
<td>Elective*</td>
<td>AEM-4013</td>
<td>Retail Management</td>
<td>4</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>31</td>
<td>Elective*</td>
<td>AEM-4014</td>
<td>Agriculture Biotechnology</td>
<td>4</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>Open**</td>
<td>AEM-4015</td>
<td>Biostatistics &amp; Bioinformatics</td>
<td>4</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>33</td>
<td>Open***</td>
<td>AEM-4016</td>
<td>Biomass utilization &amp; Renewable Energy Management</td>
<td>4</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>34</td>
<td>Ability</td>
<td>AEM-4071</td>
<td>Project/ Dissertation Report</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>35</td>
<td>enhancement</td>
<td>AEM-4072</td>
<td>Viva-Voce</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>36</td>
<td>Ability</td>
<td>AEM-4073</td>
<td>Project/ Dissertation Viva</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Elective= 8  Core= 10  Open Elect.= 4  Ability Enhancement= 10  Total= 32

<table>
<thead>
<tr>
<th>Semester</th>
<th>MABM Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Semester</td>
<td>21 (4+4+3+2+4+4)</td>
</tr>
<tr>
<td>II Semester</td>
<td>23 (4+4+2+4+4+3+2)</td>
</tr>
<tr>
<td>III Semester</td>
<td>20 (2+4+2+2+4+2+4+2)</td>
</tr>
<tr>
<td>IV Semester</td>
<td>32 (2+3+3+2+4+4+4+4+2)</td>
</tr>
<tr>
<td>Total Credits</td>
<td>96</td>
</tr>
</tbody>
</table>

(Master of Agribusiness Management)

* Course code will be provided by Controller’s Office
** Adopted from courses of the Department of Agricultural Microbiology
*** Adopted from courses of the Department of Post Harvest Engineering & Technology
Semester: I

AEM-1001 Problems of Indian Agriculture

Course Objective:
Basic objective of this course is to impart knowledge about current Indian agriculture, policies and changes which have taken place in the post independence period with a special focus upon problems being faced in the light of challenges of food security and sustainable agriculture.

Credits: 4

Unit-I
Role and importance of Agriculture in Economic Development, Features of Indian Agriculture, Causes of low productivity, Socio-cultural and Institutional constraints, Suggestive measures for improving Agricultural Productivity. Brief review of agricultural development under the Five year plans, Problems of Indian Agriculture

Unit-II
Land reforms: Meaning, Need and objectives, Measures contemplated to achieve the objectives of land reforms, Abolition of Intermediaries, Tenancy Reforms, Reorganisation of Agriculture, Rural Development Programmes and its impact on Rural Development and Agricultural development, MNREGA, Bharat Nirman

Unit-III
Agricultural Labour: Definition, causes of growth, conditions and problems, measures for improvement, Farm size and Efficiency, Food Security and Public Distribution System, Food Security System Act 2013

Unit-IV

Suggested Reading:
3. Ministry of Finance, Govt. of Indian: Economic Survey, various issues
4. Economic and Political Weekly, Selected Articles
5. Ministry of Agriculture, Govt. of India, "Indian Agriculture at a Glance 2012"
AEM-1002  Agricultural & Rural Marketing

Objective:
To familiarize the students with the system, regulation, problems, issues and the emerging phenomena in the area of agricultural and rural marketing

Credits:  4

Unit-I
Agricultural Marketing in India: nature, structure and system, Regulated Marketing, Legislation & Machinery, Marketable Surplus; Grading & standardization

Unit-II
Agricultural Diversification, Agri-business Marketing, Rural and Agri-business Entrepreneurship, Cooperative Marketing, Support Policies for Agricultural and Rural Development

Unit-III
Rural Markets patterns, problems and strategies, Agri Marketing Channels, Infrastructure of Agricultural Marketing Storage, Transport and Financing, Managerial Efficiency in Agricultural Marketing

Unit-IV
Commodity Futures Marketing, External Trade, Agricultural Exports, Globalization of Agriculture, Marketing education, research, Statistics and Information Management

Suggested Readings

Acharya S.S Agricultural Marketing in India (Oxford & IBH)  
Prasad J. Indian Agricultural Marketing (Mittal)  
Ricketts C. & Rawlins O. Introduction to Agribusiness (Delmar)  
Kashyap P. & Raut S. Rural Marketing (Dreamtech Press)  
Badi R.V. & Badi N.V. Rural Marketing (Himalaya Publishing House)
AEM-1003  Foundation of Management

Objectives:
To familiarize students of diverse background with the generic concepts of Business Management and gradually orient and enable them to appreciate the application of the very concepts in the core functional areas of management

Credits: 3

Unit-1 Fundamentals of Management
Management; de jure and de facto systems
Systems and process based definitions
Levels, functions, types of managers; specific and generic roles and skills
Schools of Management Thought; Scientific School, HR School
Behavioural, Systems and contemporary schools; Contingency approach

Unit-2 Planning
Process and steps; objectives setting, identifying business definitions Evaluating business objectives; establishing verifiable and realistic objectives
SWOT analysis; Introduction to ETOP and SAP analysis
Plan alternatives and strategic choice; Tactical planning and related concepts

Unit-3 Decision Making & Organizing
Concept of decision making; process, models, typologies, select tools and techniques
Concept of organizational structure; functional division; rationale and process
Co-ordination; functional and cross functional; rationale and techniques
Structural variants; prototypes, functional, process, product, customer and geography based structures; SBU’s
and product/matrix structures; Issues in centralized vs. decentralized structures. Leading;
staffing and directing; different techniques of directing; leadership; notion, style and approaches.
Controlling; notion, process and techniques

Suggested Readings:
Stoner, J.A.F. and Freeman, R.E., Management, PHI, New Delhi 2000 (revised edn.) Hampton,
David R., Management, TMH, New Delhi, 1997
AEM- 1004 Business Environment

Objective: To sensitize the students with the changing environment of agribusiness with which the managers have always to cope up with special reference to India.

Credits: 2

Unit-I
Types of Environment, Environmental Analysis and its Techniques, Business & Society: Consumer Rights, Consumerism, Corporate Governance, Business Ethics in India

Unit-II
Features of Indian Economy, Trends in Industrial Production in India, India’s Industrial Policy, Fiscal and Monetary Policy in India, Economic Reforms in India

Suggested Readings:

Francis Cherunilam : Business Environment (HPH)
Raj Agarwal&ParagDiwan : Business Environment (Excel Books)
A C Fernando : Business Environment (Pearson Education)
M Adhikary : Economic Environment of Business (Sultan Chand)
Mishra and Puri : Indian Economy (HPH)
Dutt, Ruddar and K.P.M. Sundaram, : Indian Economy (S Chand)
AEM-1005 Managerial Economics- I

Objective:

This course is intended to provide an overview of managerial economic theories and its applications. It intends to provide fundamental concepts and models in the theory of production and costs and sets out to provide a basic understanding of price and output determination under different types of market structures.

Credits 4

Unit-I
Demand analysis and elasticity of demand. Theory of consumer’s behavior: utility analysis, Indifference curve technique. Revealed preference theory.

Unit-II
Cost theory and estimation: Cost concepts, determinants of cost, cost-output relationship in the short run and long run, short run vs. long run costs, average cost curves, Overall Cost leadership, Cost and revenue Functions.

Unit-III

Unit-IV

Suggested Readings:
Managerial Economic Principals and worldwide applications: Dominick Solvatore, Ravikesh Srivastava
Managerial Economics; An Economic Foundation for Business Decision: Barry Keating and J. Holton Wilson.
AEM-1006  Management Accounting

The objective of this course is to familiarize students with financial accounting and equip them with the tools and techniques of management accounting

Credits:  4

Unit-I
Meaning Scope and need of accounting in Business decisions
Forms of accounting and users of accounting information
Framework of accounting conventions, principles, concepts and procedures etc.
Accounting equations and types of accounts, rules of recording business transactions

Unit II
Preparation of journal and classification of journal etc. ledger
Preparation of Trial Balance and Income Statement
Preparation of Balance sheet and adjustment entries
Practice of Farm Accounting in India

Unit III
Ratio analysis its meaning and uses
Study of liquidity ratios and leverage ratios
Study of profitability ratios and activity ratios
Meaning, uses and preparation of fund flow statements
Meaning uses and preparation of cash flow statement

Unit IV
Costing as an aid to management presentation of various costs in proper format. Cost Sheet
Marginal costing and absorption costing
Cost- Volume profit analysis
Break Even analysis
Budgeting: Objectives and Functions of a budget. Essentials of Budgeting Budgeting and Budgeting Control

Suggested Reading:

1. Accounting for Management MN Arora, Himalaya Publishing House
2. Williams, Haka ,Bettner, Financial and Managerial Accounting Tata McGrowhill
3. Accounting for Management., S.N. Maheshwari, Sultanchand& Sons
4. Advance Management Accounting Text and Cases, JawaharLal, S. Chand
7. Cost Accounting (A Managerial Emphasis) Horngren, Dater, Foster Prentice Hall of India
Semester: II

AEM-2001  Fundamental of Information Technologies

Objectives:
The student should be able to Gain an understanding of the hardware structures that make computers possible. Know the different devices and components of a computer system, know how these components interact and work together. Understand computer organization concepts and how they apply to systems development. Use e-mail and search the web using browsers.

Credits:  4

Unit-I

Unit-II
Basics of Software: Computer software: What is software, relationship between Hardware & software, types of software, acquiring software, Firmware. Primary Storage: Storage location and Addresses why more bits, Fixed and variable world length storage, RAM, ROM, PROM ad EPROM, cache memory, Registers memory, Address Registers (mar) memory buffer Register (mbr), program control Register (per). Accumulator Register, Intervention Register (IR), Input Output Register (I/O), Function of various Register.

Unit-III

Unit-IV
Networks: Communication and computer networks, classification components, technologies advantages. Internet: Introduction to the Internet, How was the Internet born, An overview of Internet application, the world wide web, file transfer protocol, E-mail. The internet as a postman.

Suggested Readings:

3- Foundation of computing: Sinha, P.K., PritiSinha BPB Publications.
4- Computer Fundamentals. Ram, B., New Age Publications
5-Information to Information Technology: SunjaySaxena
5-Introduction to Computer: Pete Nortons, TaTa McGraw-Hill Edition
6-Information and Communication Technology: Abdul Mannan
7-Fundamentals of Information Technology: Alexis Leon, Mathews Leon
Objective: To familiarize the student with tools and techniques used in testing financial decisions. The course is divided into four units:

Credits: 4

Unit-I:

Unit-II:

Unit-III:

Unit IV:
Capital Budgeting: Techniques of Project Appraisal and Ranking; Pay Back period, Accounting Rate of Return (ARR). Dividend Decision Concept; Dividend Policy; Overview of Dividend Policy, Factors influencing Dividend Decision; Issue of Bonus Shares, SEBI Guidelines for issue of Bonus Shares, Stock splits (shares) and Buy back of shares, SEBI guidelines for Buyback of shares.

Suggested Readings:
5. Btealey Myers, Principles of Corporate Finance, Tata McGrew- Hill, New Delhi
AEM-2003  Research in Agri Business

**Objective:** To make the students capable of undertaking research activity in a decision making situation

**Credits:** 2

**Unit-I**

**Unit-II**

**Suggested Reading**

G.B. Beri, Marketing Research (PHI)
Boyd and others, Marketing Research (R. Irwin)
Churchill, Marketing Research (Dryden)
Tull & Hawkins, Marketing Research (PHI)
Course Objective
This course aims at making students familiar with the working of economic system with the help of standard macroeconomic theories. Students will be taught how overall level of income, employment, output, prices etc. are determined in the economy with special focus on the role of state, market and economic policies.

Credits: 4

Unit I
Classical Theory of Income and Employment
Say’s Law of Market, Wage-Price Flexibility
Determination of Income & Employment

Unit II
Keynsian Model of Income and Employment: Aggregate Demand, Aggregate Supply and Income Determination,
Consumption Function
Investment Function
Determination of Rate of Interest

Unit III
Equilibrium in the Real Sector- IS Curve
Equilibrium – in the Monetary Sector – LM curve
Simultaneous equilibrium of Real and Monetary Sectors
Fiscal Policy Effects on Demand
Monetary Policy Effects on Demand
The interaction of Monetary and Fiscal Policies

Unit iV
IS-LM in an open economy
Mundel Fleming Model
Small open economy under Floating Exchange Rates
Small open economy under Floating Exchange Rates
Interest Rate Differential
Business Cycles, Inflation, Inflation and Interest Rates, Costs of Inflation

Suggested Readings:
1. Edward Shapiro: "Macroeconomic Analysis"
2. G. Ackley: "Macroeconomics"
3. GregoryMankiw: "Macroeconomics"
5. William H. Branson "Macroeconomics: Theory and Policy"
AEM-2005 Agri-Human Resource Development

Objectives:

To induct students into the core concepts and approach of HRD. It also aims at giving a conceptual exposure into the mechanism and processes of designing and implementing HRD sub-systems within a strategic framework.

Credits: 4

Unit-1 HRD: an Overview

HRD defined; comparison with conventional notions of HRM and Personnel management. Objectives and key tasks of HRD. Issues and factors in designing and executing HRD systems.

Unit-2 HRD Systems; part-one

Job/ Role analysis; KPA’s; Role specifications and job standards. Role description, Recruitment and Selection systems.

Unit-3 HRD Systems; part-two

Designing training strategy, systems and sub-systems. Performance appraisal systems; 360 degree system. Counselling and mentoring approach to HR.

Unit-4 HRD Systems; part-three

Potential appraisal, Career planning and Career development systems. Effective compensation systems; factors that affect compensation structure, job evaluation methods, and 3P system.

Job redesign systems; Job enrichment, MBO, Socio technical systems, Dual Career and Flexi-systems.

Suggested Readings:

Monappa, Arun and Saiyadain, Mirza S., Personnel Management, TMH, New Delhi, 1996
Saiyadain, Mirza S., Human Resource Management, TMH, New Delhi, 2000 (revised edn)
Rao, T., V., HRD Missionary, TMH, New Delhi, 1990
AEM-2006 Quantitative Techniques

Objectives:
To provide a fundamental exposure to students of diverse background into Descriptive and Inferential Statistics so as to enable them to apply these concepts & tools in quantifying their respective academic constructs and variables

Credits: 3

Unit-1
Sampling theory and sampling techniques, probability & non-probability sampling techniques, Kinds of sample. Quota convenience and judgment sampling simple random samples and selected complex Random samples. Tests of hypothesis and types of error.

Unit-2
Measures of tests of statistic: t test, Z test & F tests. Chi-square ASNOVA & Cluster analysis
Select quantitative techniques from operations and Investment management for decision taking

Unit-3

Suggested Readings:
1. Kothari C. R, Research Methodology, New Age International (p) Ltd , New Delhi, 2008 (revised edn)
AEM- 2007 Marketing Management

Objective: To make the students aware with marketing philosophy, process, issues and problems

Credits: 2

Unit-I
Marketing Management: Definition, Philosophies and Process; Marketing Tasks, Market segmentation and Targeting, Product Mix Decision

Unit-II
Product Development & Product Life Cycle; Pricing, Distribution and Promotion Decisions; Promotion Mix; Emerging Issues in Marketing Management

Suggested Reading

Kotler, P. Marketing Management APIC (PHI)
Gandhi, J. C. Marketing A Managerial Introduction
Jha&Singh Marketing Management in Indian Perspective
ABM-3001 Agricultural Policy and Planning

Objective:
Agricultural policies and planning course is intended to expose the students to macroeconomic concepts and theory, the application of the agricultural economic theory, and implication of the policies.

Credits: 2

Unit-I

Unit-II
Policy, unemployment, Govt. approaches to eradication of poverty and unemployment Agricultural Policies regarding Farm prices and Farm incomes, Credit and Finance in India. Agriculture taxation. Sustainable Agricultural Development: Dimensions and Components, Food Security in India. Child malnourishment. Agricultural Biotechnology and Food security in India. Role of livestock in Indian economy, India’s trade performance in livestock, India’s livestock sector trade: opportunities and challenges under WTO regime, Livestock Revolution and Govt. Policy.

Suggested Readings:

1-Indian Economy: Mishra and Puri
2-Agricultural Development policy:Roger,D. Norton
3-Liberalizing Food Grain Markets by Ganesh Kumar,Devesh Roy and Ashok Gulati
4-Agricultural Food Security:Kumar and Raza
5-Poverty and Human Rights:PollyVizard
6-Poverty in India,Myth and reality,Definition and Identification,CriticalEvaluation:Ratnabar Gedam
7-Poverty and Economic reforms,The social concerns :G.S.Aurora
AEM- 3002  Global Marketing

Objective: To familiarize the students with basic principles, policies and applied issues in global marketing with emphasis on agribusiness

Credits: 2

Unit-I
International Marketing: terminology, concepts, coverage and scope; Globalization and its dimensions, Methods of Entry, Foreign Market Identification

Unit-II
Product Decisions, Price and non-price factors, International Promotion, Trade Fares and Exhibitions, Distribution Channels

Suggested Readings:

Keegan - Global Marketing Management (PHI)
Varshney & Bhattcharya - International Marketing management (Sultan)
Vern Terpstra - International Marketing (Dryden)
Onkvisit & Shaw - International Marketing (Prentice Hall of India)
AEM-3003 Agricultural and Micro-Finance

Objective: To familiarize students with the Agricultural Financial System, Microfinance System and tools and techniques used for better management decisions

Credits: 4

Unit-I
Need and Importance of Agriculture Finance, Essential Features of Agriculture credit system, Agricultural credit Structure in India. Non-institutional financing for Agriculture, Merits and Demerits. Management of Agri-Finance: View point of Borrower and lender. Economic feasibility Tests of Farm credit proposal (Three R’s of credit & Four C’s of Credit).

Unit-II
Methods and mechanics of Lending to Agriculture, Role and functions of NABARD for Agriculture Finance Role of Commercial Bank and Agricultural Finance, Regional Rural Banks and Rural Finance, Its viability, Problems and challenges

Unit-III

Unit-IV
Microfinance: Concept and Revolution, Grameen experiment. Growth and development of Micro-finance in Bangladesh, World without poverty-Views of Muhammad Yunus. Microfinance and SHGs in India and its importance for socio- economic development of poor families. Microfinance and women empowerment. Role of NABARD in linking SHGs with Banks, Growth and Development.SGSY and SHGs. Role of MFIs (Non-Banking Financial Institutions) in expanding micro-credit facilities for the poorest of poor in the country. These MFIs include SKS microfinance, SHARE, BASIX, etc. Some case studies on microfinance and Agriculture Finance.

Suggested Readings:
1. S.S.M. Desai: Agriculture & Rural Banking in India, HPH
3. Pension: Agricultural Finance, Tata Mc Grow Hill
10. What is Wran with Microfinance, Edited by Thomas, dichteradnMulcom Harper
ABM – 3004 WTO and Indian Agriculture

Objectives:
To make a comparative analysis of the role played by WTO in overall economic development. To see the trend in agriculture trade and identify the key agricultural export & import items. To examine the domestic support policies, To assess the tariff and non-tariff barriers in developed nations, which is main concern for the developing nations, especially India.

Credits: 2

Unit-I
Free Trade and Globalization: Background of GATT and WTO
Important Agreements under WTO
- TRIPS
- TRIMS
- GATS
- SPS & TBT
- Anti-dumping
- Genetically Modified Foods
The Agreement on Agriculture: Experiences with the Implementation Related Issues and Concerns
- “Effective Participation in Negotiations” Implications for Trade Policy Administration”; Defending Trade Interests”; “Identifying & Exploiting Trade Opportunities”, “Policy Framework for Trade”.
- Textiles and Multi-Fiber Arrangements

Textiles and Multi-Fiber Arrangement to Agreement on Textiles land Clothing (ATC)

Antidumping Measures, Subsidies, Countervailing Duties and Government Procurement

UNIT-II
TRIPS AND Indian Agriculture
- OECD (2003), “The Impact of Trade Related Intellectual Property Rights on Trade and Foreign Direct Investment in Developing Countries”.

Dispute Settlement Mechanism under the WTO
Notes on Dispute Settlement Mechanism
Time to Stop Dumping on the World’s poor. Developing countries and the WTO negotiations

Suggested Readings:
1-WTO and development Opportunities: S.B.Verma
2-WTO and Developing countries: Surendra Bhandari
3-Trade liberalization and Indian Agriculture: Seema Bathla
4-Indian Economy and the WTO New Challenges and Strategies: Vibha Mathur
5-WTO, India and emerging areas of Trade challenges and strategies: R Renehan
6-Trade liberalization and Poverty in India: Veena Jha, Sarika Gupta, James Nedumpara, Kailas Karthikeyan
7-WTO, Globalization and Indian Agriculture: Mohd Iqbal Ali, and G. Bhaskar
8-Economics and the global Environment: Charls S. Pearson

AEM-3005 Select Computer Application Packages

Objective:
To develop among the students the skills to use computer applications for word processing, data analysis and presentation and database handling.

3+1 Credits

Unit-I Word Processing:
An introduction to different word processing packages, utility, preparation of documents, editing, corrections and printing.

Unit-II Spreadsheet:
Excel and its uses in agriculture and data manipulation.
Practice sessions on above

Unit-III Database Management
Access and its utility maintenance and manipulation of Databases. Use of Internet and E-mail.
Practice sessions on above

Unit- IV Problems, Exercises and Practicals (on Above topics)

Suggested Readings:
1. Peter Norton, Guide to MS Office, (TMH)
2. Mastering Office professional by Moseley & Boodey (BPB)
3. Using the World Wide Web by Wall, (PHI)
AEM-3006 Agricultural Investment Management Objectives:

To impart knowledge of investment decision making and familiarize students with the existing and growing financial and investment markets in India in the post globalization era

Credits: 2

Unit-1 Investment; Meaning and Scope

Investment; meaning, objectives and principles of investment. Investment media and their relative merits. Portfolio Management; meaning, rationale and analysis

Unit-2 Investment Markets in India

Structure of financial market; treasury bills market, call money market, market for financial guarantees, market for mortgage, forex market, Govt. securities market, industrial securities market- New Issue market and Stock exchange market.

Suggested Readings:

Donald E. Fischer, and Ronald J. Jordan, Security Analysis and Portfolio Management, PHI, New Delhi 1996 (revised edn.)

Bhole, L. M., Financial Institutions & Markets, TMH Education, New Delhi, 2009
AEM:3011  Consumer Behaviour

**Objectives:**

To train students in the relevant concepts of consumer behaviour, its processes and key applications in business management.

**Credits:** 2

**Unit I**


**Unit II**

Attitudes and their characteristics; Attitude measurement and models of attitudes; Tricomponent and Multiattribute models; Attitude formation and Attitudinal change; Cognitive dissonance and Attribution theory. Motivation; Key concepts. Key applications of factor and process theories.

**Suggested Readings:**

1. Schiffman L.G and Keslie, L.Kam K. Consumer Behaviour
3. Mowen John consumer behaviour
AEM-3012 Elective WTO And Intellectual Property Rights

Objectives:

To sensitize the student about the importance of WTO and intellectual property in the global economy.

Credits: 4

UNIT-I


UNIT-II


UNIT-III


UNIT-IV


**Learning resources**

**Text books**


**Reference books**


**Supplementary reading material**


**Websites**

www.wipo.int/

www.wto.org/english/tratop_e/trips_etrips_e.htm

www.wipo.int/pct/en/texts/articles/atoc.htm

www.wipo.int/treaties/en/ip/wct/

www.ipmatters.net/features/000707_gibbs.html

www.iptoday.com

**Journal**

Journal of Intellectual Property Rights

Indian Journal of Intellectual Property Law

Journal of Intellectual Property Law & Practice

IDEA- The Intellectual Property Law Reviews
Semester: IV

AEM-4001 Agricultural Production Economics

Objective
To expose the students to the concept, significance and uses of agricultural production economics.

Credits: 4

Unit-I

Unit-II
Production Cost: Opportunity return, variable cost and fixed cost. The total cost Function. Effects of price changes. The long and short run time period, some applications of cost functions in production and processing of agricultural products: On Farm grain drying and storage. Frying processing plants. Cotton mechanization peach hydrocooling.

Unit-III
Production possibilities joint products, competitive products complementary products, supplementary products choosing the optimum product combination. Optimum combinations of many products. Specialization and diversification. Farm planning and budgeting supply response and Cob-Web theorem, elements of risk and uncertainty in planning and decision making.

Unit-IV

Suggested Readings:
1- Agricultural production Function: Earl o Heady, John L Dillen
2-Principal of Microeconomics I : S.K.Mishra and V.K.puri
3-Micro Economics Theory and Applications: Anindya Sen
4-Economics; An Analytical introduction by Amos Witztum
5-Beattie BR & Taylor CR. The Economics of Production. John Wiley & Sons.
8-Heady EO. Economics of Agricultural Production and Resource Use. Prentice-Hall.
9-Sankayan PL. Introduction to Farm Management. Tata McGraw Hill.
AEM- 4002  Management of Agricultural Cooperatives

Objective: To make the students understand the principles and practice of cooperation as they are applicable to the Agricultural Sector of India.

Credits: 4

Unit-I

Unit-II
Theory and practice of Agricultural Cooperative credit system critical study of organization and financial structure, operation and Management of selected cooperative credit institutions-Central Cooperative Banks. State Cooperative Banks. Land Dev. Banks and NABARD

Unit-III
Formation and Management in Agriculture Cooperative Societies; Re-organization of Agricultural Credit Societies, Multipurpose cooperative Societies; Large-Sized Cooperative Societies, Service Cooperatives. Cooperative farming in India

Unit-IV
Cooperative Processing; Management of Cooperative Sugar Factories; Cooperative Agricultural marketing; Growth and Development Problems and challenges Cooperative Education and Training Management in India; Role of State in the progress Indian Cooperative Movement. Dairy Cooperatives, Growth and Development, Problems, Measures to overcome these problems Indian Cooperatives in this era of Globalisation

Suggested Readings:
1. B.S. Mathur  Cooperation in India, SahityaBhawan, Agra
2. Kamat, G.S.  Cooperative Management, HPH
3. Bedi R.D.  Theory, History and Practical of Cooperation
4. Fay, C.R.  Cooperation in India and Abroad
5. Raj Krutia  Cooperative Farming some Critical Reflection
6. Sami-uddin& M. Rechmans  Cooperative Sector in India, S. Chand
7. Rais Ahmad  Cooperative Development and Management Text and Cases, Mittal Pub. House
AEM-4003  
Strategic Management

Objectives:
To impart conceptual knowledge about the scientific framework, methods and processes of functioning of professionally managed systems in contemporary and emerging business environments; enabling students to appreciate the roles managers play as a strategist in the later years of their career.

Credits: 3

Unit-1 Overview and SWOT analysis
Concept of strategy, Strategic decision making process
Vision, mission, values, corporate ethics, business objectives and definition
SWOT analysis; environmental and organizational appraisal

Unit-2 Strategy Formulation
Corporate and business level strategies; Grand strategies and strategic alternatives. Selecting right strategy through corporate portfolio techniques.

Unit-3 Issues in strategy implementation
Functional and operational plan aspects. Procedural, budget and project aspects.
Structural, behavioral and cultural aspects. Strategic evaluation and control.

Suggested Readings:
Kazmi, Azhar, Business Policy, TMH, New Delhi, 2001(revised edn)
AEM-4004  Theory of Economic Development

Course Objective
Paper focuses upon problems of economic development of developing countries in the light of theories of development. Special attention is paid on agricultural and rural development issues.

Credits:  4

Unit-I:
Early supply Side models of growth and distribution: Adam Smith’s and Ricardo’s model,
Demand side models of growth: Malthusian model, Post-Keynsian growth models: Harrod, Domar and Solow’s Growth Models, Rostow’s stages of economic growth, Lewis two sector model.

Unit-II:
Imperatives of Agricultural progress and rural development, Structure of Third World Agrarian system, Designing an Agricultural strategy, Unimodel and bimodel agricultural strategies,
Multiple objectives of agricultural strategy, Agricultural transformation from subsistence to commercial farming, Strategy of Agricultural and Rural Development.

Unit-III:

Unit-IV:
Debt Vs Investment flows: Foreign aid. Why Donors Give Aid? Why LDCs Accept Aid? The effects of Aid, Towards a New View of Foreign Aid

Suggested Readings:
3. Jones, An Introduction to Modern Theories of Economic Growth"
AEM-4005  Organizational Behavior & Communication

Objectives:

To train students into the relevant concepts of individual and group dynamics including organizational communication processes so as to help them cultivate requisite interpersonal skills (IPS) at workplace

Credits: 3

Unit-1

Organization Behaviour: an Overview and Individual Dynamics

The discipline of OB; rationale and scope; Perception theory; process, factors that affect perception. Distorted perceptions. Motivation; key factor and process theories; Integrative approach. Learning theory; features and process. Personality; major theoretical and pragmatic approaches.

Unit-2

Group Dynamics

Group formation; types, theories and processes.
Group conflicts; process and typology. Positive and negative conflicts and management.
Process of change; resistance to change and its management

Unit-3

Communication

Need and roles of communication at workplace. Definition, process, model and elements of communication; communication protocols. Barriers to communication and management.

Suggested Readings:
AEM- 4006  Export Import Management

**Objective:** To develop an understanding of the export import policies, procedures and documentations for an agribusiness

**Credits:** 2

**Unit-I**
Export Import Policy and Export Assistance, Export Finance, Export Infrastructure & Service agencies, Export Procedure and Formalities, Important Documents in Export

**Unit-II**
Import Procedure, Import Licensing, Warehousing and Custom Duties, Important Documents in Import, Exchange Provisions and Regulations for Export and Import

**Suggested Readings**
Nabhi K. Jain- Export Manual & Documentation (Jain Book Depot.)
Nabhi K. Jain- How to Export? (Jain Book Depot.)
Nabhi K. Jain- How to Import? (Jain Book Depot.)
GOI (Min. of Commerce) Exim Policy Document (latest)
Jain Khushapt S. Export Import Proced.&Docum. (Himalaya Publishing House)
Rathor&Rathor  Export Marketing (Himalaya Publishing House)
AEM-4011 ELECTIVE International Trade in Agri Business

Objective:
This course makes students familiar with basic theories of international trade, and how does trade can be beneficial for nations. It also helps students understand the basic concepts, policy issues related to trade and its application in agriculture.

Credits: 04

Unit-I
Mercantilist views on trade, Theories of Absolute Cost and Comparative Cost Advantage, Opportunity Cost theory, Community Indifference Curves, Offer Curves.
Hekschcher-Ohin theory; Factor Price Equalization Theorem, Stolper Samuelsson Theorem, Leentief-Paradox.

Unit-II
Concepts Balance of Payment, Balance of Trade, Balance of Current and Capital Account, J Disequilibrium in Balance of Payments, Methods to Correct disequilibrium, Expenditure-Changing and Expenditure Switching policies Devaluation and its impact

Unit-III
Foreign Exchange Rate Fixed vs. Flexible Exchange Rate;
Demand for and Supply of Foreign Exchange, Determination of Exchange Rate, Sport and Forward Rates, Foreign Exchange Futures and options, Foreign Exchange Risk, Hedging and Speculation, Interest Arbitrage, Trade restrictions, Tariff, Quota and Exchange Control.

Unit-IV

Unit-V
India’s Foreign Trade: Direction and Composition; Agricultural trade in India, India’s Foreign Trade Policy, Capital Account Convertibility in India; FDI in retail

Suggested Readings
1. Bo Soderston: International Economic
AEM-4012  Elective  Agricultural Derivatives & Risk Management

Objective:
To expose the students to various tools and techniques of Financial Risk Management and Insurance Policies in Agri-Business.

UNIT- I Introduction:
Meaning and purpose of derivatives; Forward contracts, future contracts, options, swaps and other derivatives; Type of traders; Trading future contracts; Specification of the future contracts; Operation of margins; Settlement and regulations.

UNIT- II Options:
Types of options; Option trading; Margins; Valuation of options; Futures: Hedgers and speculators; Future contracts; Future markets, - margins, trading, future positions and taxation; Swaps: Mechanism of interest rate swaps, valuation of interest rate swaps; Currency swaps and its valuation

UNIT- III
Sources of Financial Risk: Credit market, default risk, foreign exchange risk, foreign exchange risk, interest rate risk, purchasing power risk etc.; Systematic and non-systematic risk.

UNIT-IV Risk Management through Agricultural Insurance:

REFERENCES:
4. International Financial Management by V Sharma
5. International Finance by P.G. Apte
AEM-4014    Elective   Agriculture Biotechnology

Unit – 1 Introduction to Agricultural Biotechnology


Unit – 2 Safety aspects and Comparative Status of GM Crops:

Unit – 3 Food Safety Aspects of Agricultural Biotechnology

Food safety – Concept and Meaning of food safety, Issues of food safety, Concept and principle of safety assessment of foods derived from GMOs. Issues of GMOs and food safety-allergenicity, toxicity, antibiotic resistance, horizontal gene transfer, Composition analysis of GM foods, Food safety regulation of GMOs and GM food in India, Safety Protocol in India for GM Crops, National policy reaction to GMOs.

Unit – 4 Environmental Aspects and Agricultural Biotechnology
Impact of GMOs on environment: biodiversity, ecological system, sustainability (pesticides, herbicides, carbon emission etc.), impact on Food security, Environmental benefits and risk of GM crops, environmental protection act 1986, Role of GM Crops in Sustainable Agriculture, Food Security Benefits of Transgenic Crops

Suggested reading:
3. Agricultural Biotechnology by H. D. Kumar.
5. Agricultural Biotechnology by Ashok Kumar.
6. Food Safety of Proteins in Agricultural Biotechnology (Food Science and Technology) by Bruce G. Hammond.
8. Engineering the Farm: The Social And Ethical Aspects Of Agricultural Biotechnology, Edited by Marc Lappe and Britt Bailey.
AEM-4015 Open Elective: Biostatistics And Bioinformatics

Objectives:
Basic knowledge of statistics and bioinformatics and its use are essential aspect of academic learning in the field of Microbiology. The course is designed to provide introductory knowledge to the students so that they can make effective use of statistical and bioinformatics tools in their studies and project work.

Sessional/Assignment: 10 Marks
Mid Semester: 30 Marks
End Semester: 60 Marks
M.Marks: 100

Credits: 04

Unit-I
Measures of central tendency and dispersion, standard distribution: binomial distribution and normal curve, Poisson multiple, regression. Test of significance, t, f and Chi square test, Design of experiment, basic principles, completely randomized, block, latin square and split plot design, Principal component analysis (PCA)

Unit-II
Introduction to sequence analysis, Basic of biocontrol data basis, Tools for sequence alignment, Phylogenetic analysis, Gene prediction methods, Visualization and prediction of protein synthesis. Searching literature on pubmed.

Unit-III
Similarity searching by BLAST, Different data bases including gene bank, sequence formatting, Multiple sequence alignment (e.g. CLUSTALW), Detecting functional sites in DNA; Promoters, exons, PolyA sites. Introducing gene finders, Identification of open reading frames (ORF) and repeats in DNA. Restriction enzyme mapping,

Unit-IV
Internet tools for DNA sequence translation, Protease digestion mapping, Prediction of signal peptide, MW, PI, secondary structure, tertiary structure, transmembrane domains and post-translational modifications including phosphorylation, glycosylation, acetylation, signal peptide cleavage site.

Suggested Readings:
Bioinformatics (Second edition), M.M.Rangs, Agrobios India,(2007)
Bioinformatics ( sequence and genome analysis ) by David W. Mount, CBS Publisher and Distributors (2005)
Genes” (VIII) Benjamin Lewin, Oxford University Press, London.

CREDIT-4