Minutes of the Special Meeting of the Board of Studies held on 28.08.2019

A special meeting of Board of Studies of the Department of Economics was held on 28.08.2019 at 10:00 a.m in the office of the Chairperson.

The following were present:

1. Prof. Ashok Mittal
2. Prof. Nisar A. Khan
3. Prof. Syed Noman Ahmad  (In the Chair)
4. Prof. Shehroz A. Rizvi
5. Prof. Zeba Sheereen
6. Prof. Md. Tarique
7. Dr. Mohammad Asif
8. Dr. Shaukat Haseen
9. Dr. Mohd. Azam Khan
11. Dr. Jamil Ahmad
12. Dr. Md. Firdos Ahmad
13. Dr. Shahina Parween
14. Dr. Shirin Rais
15. Dr. Abdul Azeez N.P
17. Dr. Amir Rehmani
18. Prof. S. Zainuddin  (Assigned Member)

1. Constitution of Research Advisory Committee for PhD students Admitted in 2018-19

   The Research Advisory Committees for PhD students admitted in 2018-19 constituted and approved by the board. (APPENDIX I)

2. Approval of Revised Syllabi of different courses and minor change in the course structure of MA programme

   Board considered and approved the revised syllabi of different courses and Minor change in the course structure of M.A programme. (APPENDIX II & III)

3. Change of supervisor in place of Dr. Mohd. Saeed Khan (Voluntary retired)

   Board considered and approved the change of supervisor of following PhD students
   a. Faizan Shabir
   b. Muzaffar Hussain Dar
   c. Sifat Fatima
Board has also approved the appointment of Dr. Md. Zulquar Nain as supervisor of the above students.

4. **Appointment of panel of experts for selection committees to the teaching posts in the Department**

Board considered and approved four panels of experts for selection committees to the teaching posts in the Department. (*APPENDIX IV- Confidential*)

The meeting came to an end after transacting the said business.

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**Chairman**  
Department of Economics  
A.M.U., Aligarh

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(Prof. Syed Noman Ahmad)  
Chairperson
Minutes

Special meeting of the Faculty of Social Sciences was held in the Conference Hall of the Faculty of Social Science on 31st August, 2019 at 12:30 p.m.

The following members were present:

<table>
<thead>
<tr>
<th></th>
<th>Member</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prof. Akbar Husain</td>
<td>Dean, Faculty of Social Sciences (in Chair)</td>
</tr>
<tr>
<td>2</td>
<td>Prof. Nisar A. Khan</td>
<td>Department of Economics</td>
</tr>
<tr>
<td>3</td>
<td>Prof. Syed Noman Ahmad</td>
<td>Department of Economics</td>
</tr>
<tr>
<td>4</td>
<td>Prof. Shehroz Alam Rizvi</td>
<td>Department of Economics</td>
</tr>
<tr>
<td>5</td>
<td>Dr. Shahina Parween</td>
<td>Department of Economics</td>
</tr>
<tr>
<td>6</td>
<td>Dr. Md. Firdous Ahmad</td>
<td>Department of Economics</td>
</tr>
<tr>
<td>7</td>
<td>Prof. Nasrin</td>
<td>Department of Education</td>
</tr>
<tr>
<td>8</td>
<td>Prof. Sajid Jamal</td>
<td>Department of Education</td>
</tr>
<tr>
<td>9</td>
<td>Prof. Gunjan Dubey</td>
<td>Department of Education</td>
</tr>
<tr>
<td>10</td>
<td>Dr. Noora Abdul Kader</td>
<td>Department of Education</td>
</tr>
<tr>
<td>11</td>
<td>Prof. Yaqub Ali Khan</td>
<td>Department of History</td>
</tr>
<tr>
<td>12</td>
<td>Prof. S. Jabir Raza</td>
<td>Department of History</td>
</tr>
<tr>
<td>13</td>
<td>Prof. Ruquia Hussain</td>
<td>Department of History</td>
</tr>
<tr>
<td>14</td>
<td>Dr. Mohd. Parvez</td>
<td>Department of History</td>
</tr>
<tr>
<td>15</td>
<td>Dr. Shadab Bano</td>
<td>Department of History</td>
</tr>
<tr>
<td>16</td>
<td>Dr. Ziauddin</td>
<td>Department of History</td>
</tr>
<tr>
<td>17</td>
<td>Prof. Muhammad Ismail</td>
<td>Department of Islamic Studies</td>
</tr>
<tr>
<td>18</td>
<td>Prof. Naushad Ali P.M.</td>
<td>Department of Library &amp; Information Science</td>
</tr>
<tr>
<td>19</td>
<td>Dr. M. Masoom Raza</td>
<td>Department of Library &amp; Information Science</td>
</tr>
<tr>
<td>20</td>
<td>Dr. Muzammil Mushtaq</td>
<td>Department of Library &amp; Information Science</td>
</tr>
<tr>
<td>21</td>
<td>Dr. Mohammad Nazim</td>
<td>Department of Library &amp; Information Science</td>
</tr>
<tr>
<td>22</td>
<td>Prof. Afriina Rizvi</td>
<td>Department of Mass Communication</td>
</tr>
<tr>
<td>23</td>
<td>Dr. Pitabas Pradhan</td>
<td>Department of Mass Communication</td>
</tr>
<tr>
<td>24</td>
<td>Dr. G.K. Sahu</td>
<td>Department of Mass Communication</td>
</tr>
<tr>
<td>25</td>
<td>Dr. Huma Parveen</td>
<td>Department of Mass Communication</td>
</tr>
<tr>
<td>26</td>
<td>Prof. Ikram Husain</td>
<td>Department of Physical Education</td>
</tr>
<tr>
<td>27</td>
<td>Dr. Zamirullah Khan</td>
<td>Department of Physical Education</td>
</tr>
<tr>
<td>28</td>
<td>Prof. Roomana N. Siddiqui</td>
<td>Department of Psychology</td>
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<tr>
<td>29</td>
<td>Dr. Asma Parveen</td>
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<td>30</td>
<td>Dr. Salma Kaneez</td>
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<td>31</td>
<td>Prof. Nigar Zuberi</td>
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<td>32</td>
<td>Dr. Mohibul Haq</td>
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<tr>
<td>33</td>
<td>Dr. Aftab Alam</td>
<td>Department of Political Science</td>
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<tr>
<td>34</td>
<td>Prof. S. Zainuddin</td>
<td>Department of Sociology</td>
</tr>
<tr>
<td>35</td>
<td>Prof. Abdul Waheed</td>
<td>Department of Sociology</td>
</tr>
<tr>
<td>36</td>
<td>Prof. M. Akram</td>
<td>Department of Sociology</td>
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Before taking up the agenda the Dean welcomed the members and apprised them of the urgent need for calling the meeting of the Faculty.

**Item No. 1:** Considered the syllabi of various courses, modified/upgraded and New Courses as recommended by the Board of Studies of the various Departments/Centre of Studies held on the following dates:

<table>
<thead>
<tr>
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<th>Department/Centre</th>
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<td>2</td>
<td>Education</td>
<td>02.05.2019</td>
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<tr>
<td>3</td>
<td>History</td>
<td>01.06.2019</td>
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<td>4</td>
<td>Islamic Studies</td>
<td>28.05.2019</td>
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<tr>
<td>5</td>
<td>Library &amp; Information Science</td>
<td>19.12.2018</td>
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<td>7</td>
<td>Physical Education</td>
<td>10.05.2019 (referred back to decide in the next meeting of BoS)</td>
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<td>8</td>
<td>Political Science</td>
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<td>9</td>
<td>Psychology</td>
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<td>10</td>
<td>Sociology</td>
<td>24.12.2018</td>
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<td>11</td>
<td>Social work</td>
<td>30.05.2019</td>
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<tr>
<td>13</td>
<td>Women’s Studies</td>
<td>05.08.2019</td>
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</table>

**Item No. 2:** Considered the amendments in (1) the Ordinances (Academic related to MSW Courses and (2) Syllabi of B.A. (Hons.) Social Work recommended by the Board of Studies of Department of Social Work held on 30.05.2019.

The meeting then came to an end with a vote of thanks.

Prof. Akbar Husain
Dean
Programme Specific Outcome (PSO)
M.A.Economics

The M.A. in Economics program emphasizes practical applications of economic theory. It is organized to provide students with analytical tools by which they can solve many economic problems existing in the real world. Students will be able to apply:

1. **Critical thinking**
   a. Apply economic analysis to evaluate everyday problems
   b. Apply economic analysis to evaluate specific policy proposals

2. **Quantitative reasoning skills**
   a. Understand how to use empirical evidence to evaluate an economic argument
   b. Obtain or collect relevant data using specific research methods
   c. Interpret statistical results
   d. Perform appropriate statistical analysis of data
   e. Develop deeper quantitative thinking skills

3. **Problem-solving skills**
   a. Analyze problems that have clear solutions
   b. Propose solutions for problems that do not have clear answers

4. **Communication skills**
   a. Communicate effectively in written or spoken form about specific economic issues
   b. Develop a well-organized written argument that states hypothesis
   c. Present an economic argument orally
M.A. (Economics)

COURSE STRUCTURE
Choice Based Credit System
(Effective from Academic Session 2019-20)

M.A. I Semester

Core Courses (Compulsory)

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Credits</th>
<th>Period</th>
<th>Marks</th>
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<tr>
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Skill Enhancement Courses (Any ONE of the following)

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<th>Sl. No</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Credits</th>
<th>Period</th>
<th>Marks</th>
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<tbody>
<tr>
<td>5.</td>
<td>ECM-1005</td>
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<td>ECM-1006</td>
<td>Computer Application in Economics-I</td>
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Elective Courses (Any ONE of the Following)

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Credits</th>
<th>Period</th>
<th>Marks</th>
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<tbody>
<tr>
<td>7</td>
<td>ECM-1011</td>
<td>History of Economic Thought</td>
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<td>ECM-1012</td>
<td>Economics of Infrastructure</td>
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<td>ECM-1013</td>
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<td>Institutional Economics</td>
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M.A. II Semester

Core Courses (Compulsory)

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<th>Marks</th>
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<tbody>
<tr>
<td></td>
<td>ECM-2001</td>
<td>Microeconomics-II</td>
<td>4</td>
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<tr>
<td></td>
<td>ECM-2002</td>
<td>Macroeconomics-II</td>
<td>4</td>
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<tr>
<td></td>
<td>ECM-2003</td>
<td>International Economics</td>
<td>4</td>
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<tr>
<td></td>
<td>ECM-2004</td>
<td>Industrial Economics</td>
<td>4</td>
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Skill Enhancement Courses (Any ONE of the following)

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Credits</th>
<th>Period</th>
<th>Marks</th>
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<tbody>
<tr>
<td></td>
<td>ECM-2071</td>
<td>Seminar</td>
<td>02</td>
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<tr>
<td></td>
<td>ECM-2073</td>
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<td>Economics-II</td>
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Skill Enhancement Course (Compulsory)

<table>
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<tr>
<th>Sl. No</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Credits</th>
<th>Period</th>
<th>Marks</th>
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<tr>
<td></td>
<td>ECM-2072</td>
<td>Viva Voce</td>
<td>02</td>
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Elective Courses (Any ONE of the Following)

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Course No.</th>
<th>Course Title</th>
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<tbody>
<tr>
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<td></td>
<td>ECM-2012</td>
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<td>ECM-2014</td>
<td>Urban Economics</td>
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<td>ECM-2015</td>
<td>Gender Economics</td>
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</table>
### M.A. III Semester

#### Core Courses (Compulsory)

<table>
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<th>Sl. No.</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Credits</th>
<th>Period</th>
<th>Marks</th>
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<tbody>
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<tr>
<td>1</td>
<td>ECM-3001</td>
<td>Economic Development &amp; Policy in India-I</td>
<td>4</td>
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<tr>
<td>2</td>
<td>ECM-3002</td>
<td>Economics of Growth</td>
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<td>3</td>
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<td>Public Economics</td>
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<td>ECM-3004</td>
<td>Agricultural Economics</td>
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#### Skill Enhancement Course (Compulsory)

<table>
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<th>Sl. No.</th>
<th>Course No.</th>
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<th>Credits</th>
<th>Period</th>
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<tbody>
<tr>
<td>5</td>
<td>ECM-3005</td>
<td>Term Papers</td>
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#### Elective Courses (Any ONE of the Following)

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<th>Sl. No</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Credits</th>
<th>Period</th>
<th>Marks</th>
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<tbody>
<tr>
<td>6</td>
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<td>Econometrics</td>
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<td>7</td>
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<td>8</td>
<td>ECM-3013</td>
<td>Financial Economics</td>
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<td>9</td>
<td>ECM-3015</td>
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#### Open Elective Course (For the students of other Departments)

<table>
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<tr>
<th>Sl. No</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Credits</th>
<th>Period</th>
<th>Marks</th>
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<tbody>
<tr>
<td>10</td>
<td>ECM-3091</td>
<td>Indian Economic Problems</td>
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M.A. IV Semester

Core Courses (Compulsory)

<table>
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<th>Sl. No</th>
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<th>Course Title</th>
<th>Credits</th>
<th>Period</th>
<th>Marks</th>
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<tr>
<td>1</td>
<td>ECM-4001</td>
<td>Economic Development &amp; Policy in India-II</td>
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<td>2</td>
<td>ECM-4002</td>
<td>Economics of Development</td>
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<td>41</td>
<td>3070</td>
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<tr>
<td>3</td>
<td>ECM-4003</td>
<td>Monetary Theory and Policy</td>
<td>4</td>
<td>41</td>
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<tr>
<td>4</td>
<td>ECM-4004</td>
<td>Environmental Economics</td>
<td>4</td>
<td>41</td>
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Skill Enhancement Courses (Compulsory)

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Credits</th>
<th>Period</th>
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<tr>
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Elective Courses (Any ONE of the Following)

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<th>Credit</th>
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<td>ECM-4012</td>
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SUMMARY

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*Core Courses  ^Skill Enhancement Courses  #Elective Courses  &Open Elective Course

(Prof. Syed Noman Ahmad)
Chairperson

Approved by BOS, Dept. Of Economics and Faculty of Soc. Sciences in its meetings held on 28.08.2019 and 31.08.2019 respectively.
Syllabus for M.A. Economics
AMU, Aligarh

SEMESTER-I
ECM-1001, Microeconomics-I

Credits: 04
(Compulsory)

Course Objectives: This paper aims at analyzing the Economic behaviour of the consumers, firms and markets. It is mainly concerned with the objective of equipping the students in a comprehensive manner with various aspects of consumer behaviour and demand analysis, Production theory and behaviour of cost, equilibrium of firm under various forms of market.

Course Outcomes: The students will be able to:
1. Know the principles behind consumer’s decision making;
2. Apprehend the reasons for various policy decisions benefitting individuals;
3. Capture the distinction between the traditional and pragmatic approach to demand analysis;
4. Understand the decision making approach in the situation of asymmetric information;
5. Establish the physical and monetary relationship between inputs and output and the way level of production is decided;
6. Discern how consumer’s and producer’s interact with each other in the market to reach at decision governed by their bargaining capacity.

Unit-I: Theory of consumer behaviour

The Economics of Information: The information problem, Lemon’s market and adverse selection, The insurance market and adverse selection, Moral hazard and market signalling.

Unit-II: Production and Cost Functions
Production function, Isoquants, Returns to factor and Returns to scale, factor Substitution, Multi-Product Firm, Technical Progress and Production Function. Equilibrium of the firm: Choice of optimal combination of factors of production.
Cobb-Douglas, CES, VES and their properties.

Traditional and Modern theories of Cost; Analysis of economies of scale; Relevance of shape of costs in decision making, Derivation of cost function from production function.
**Unit-III: Market Equilibrium**


**Readings:**


Friedman, M, Essays in Positive Economics, Chicago University Press, Chicago


Layard, R. and Walters, Microeconomic Theory, McGraw Hill, New York


Barthwal, R.R, Microeconomic Analysis, New Age, New Delhi.


Kreps, David M, A Course in Micro-economic Theory, Princeton University Press,


Syllabus for M.A. Economics
AMU, Aligarh

SEMESTER-II
ECM-1002, Macroeconomics-I

Max. Marks : 100
Sessional : 30
Exam. : 70

Credits: 04
(Compulsory)

Course Objectives: Macroeconomics deals with the movement, fluctuations and growth in economic aggregates like income, employment interest rates and the price level. It attempts to explain the past behaviour of such variables, predicts the likely future events, and helps policy makers to formulate the appropriate policies for improving the economic welfare of a country. The basic objective of this course is to help the learners in proper understanding of the economic aggregates.

Course Outcomes: The student will be able to:
1. Understand the basic concepts and various approaches to macroeconomics.
2. Know the systematic facts and latest theoretical developments for empirical analysis.
3. Acquire a logical and consistent framework for understanding the main macroeconomic facts and events.
4. Evaluate economic models to assess the validity and relevance of various economic policies.

Unit-I: Classical and Keynesian Approach
Basic classical models, the building blocks-Say's law and quantity theory of money, Wage-Price flexibility, labour market and its equilibrium; Policy implications of classical model; Pigou's theory; Basic Keynesian model; Balanced budget multiplier; IS-LM analysis in a closed economy; Keynesian reappraisal by Clower, Leijonhufudvud and Malinvaud.

Unit-II: New Macroeconomics
Main features of the new classical macroeconomics; Friedman’s Adaptive expectations hypothesis; Policy ineffectiveness theorem; Rational expectations-Anticipated and unanticipated shocks; Efficient market hypothesis; Lucas imperfect information model; Policy irrelevance, Lucas critique; New Keynesian models of wage-price stickiness- Mankiw model, Efficiency-wage model, Coordination-failure models, Insider-outsider models, Wage-contract model, Staggered price adjustment; Microeconomic foundations of macroeconomics.

Unit-III: Money
Quantity theory of money; Keynes theory of money and prices; Patinkin’s rehabilitation of the quantity theory of money; Demand for money-Approaches of Classical, Keynes, Friedman, Baumol and Tobin; Disequilibrium money and buffer stock models.
Supply of Money- Measures of money supply, Money stock determination, Money multiplier; RBI approach to money supply in India.
Readings:
Heijdra and Vander Ploeg, Foundations of Modern Macroeconomics, Oxford University Press.
Rakshit M, Studies in Macroeconomics of Developing Countries, Oxford University Press, New Delhi.
Syllabus for M.A. Economics

SEMESTER-I

ECM-1003, Mathematical Methods for Economics

Max. Marks : 100
Sessional : 30
Exam. : 70

Credits: 04
(Compulsory)

Objectives: The aim of this course is to introduce students with the Mathematical concepts and methods used to analyse consumer behaviours, producer behaviours and determination of price in various markets. The primary goal is to strengthen student's critical thinking and reasoning skills at planning economic research and to enable them to communicate results effectively.

Course Learning Outcomes: After Successful Completion of this course the students will be able to:

1. Understand the basic techniques in Calculus such as Differentiation and Integration; apply these techniques in a variety of applications such as to calculate different types of elasticities, consumers surplus and producers surplus etc.
2. Solve constrained and unconstrained optimization problems involving functions of single and multiple variables.
3. Use the Lagrange multiplier method to solve constrained optimization problem involving functions of single and multiple variables.
5. Familiarize with the mathematical tools and techniques that Economists commonly use to analyse economic issues and find solutions to complex economic problems.

Unit-I: Differential calculus

Derivatives – partial and total, economic applications, marginal and elasticity concepts, functions of several variables, implicit function theorem, higher order derivatives and Young’s theorem, Taylor's approximation, convex sets, convex and concave functions, properties of linear homogenous functions, Euler's theorem Problems of Maxima and Minima in Single and Multivariable Functions; Constrained and unconstrained optimization with first-order and second-order conditions, Lagrangian Method, Hessian and Jacobian Matrices, Applications – utility maximization, cost minimization, profit – output maximization.
Unit-II: **Integral calculus, Difference Equations, Differential Equations and Matrix**

Integration; Rules of Integration; Taylor Series Formula, Application to Consumer's Surplus and Producer's Surplus; Growth Rates and Simple Properties of Time Path of Continuous Variables.


Differential Equations: Linear first-order differential equation. Linear second-order differential equation with real equal and unequal roots and complex roots.

Matrices: its elementary operations; different types of matrix. Solution of system of linear equations-Cramer's rule; Eigen values and Eigen vectors.

Introduction to input-output analysis.

Unit-III: **Linear Programming and Game Theory**

Linear Programming – Formulation of a Linear Programming Problem, Solution of Linear Programming through Graphical and Simplex Methods; Formulation of the Dual of a Linear Programme and its Interpretation.


Readings:

Syllabus for M.A. Economics

AMU, Aligarh

SEMESTER-I

ECM-1004, Statistical Methods

Max. Marks : 100
Sessional : 30
Exam. : 70

Credits: 04
(Compulsory)

**Objectives:** This paper of Statistical Methods is taught to the students at Master’s level with the basic aim of imparting knowledge of various Statistical Methods (techniques) to them. Especially those tools are taken in detail which are frequently used in social sciences research such as estimation, hypothesis testing, Regression & correlation and use of probability which is essential in the world of uncertainty.

**Course outcomes:** This course will help the students:

1. To know about the basic statistical tools.
2. To use the statistical tool in various economic problems.
3. To deal in approximation and prediction for future.
4. To develop an understanding in dealing with uncertain world.

**Unit-I: Probability Theory and Distribution**

Elementary Probability Theory, Types of probability; Classical version; Relative frequency of occurrence; and axiomatic Probability. Simple and Conditional Probability, addition and multiplication theorems, Bay’s theorem, Random variables, Mathematical Expectation and its use in decision making, Probability distribution: Binomial, Poisson and Normal.

**Unit-II: Theory of Sampling and Estimation**

Theory of sampling: Types of sampling; Small and large samples, sampling distribution: distribution of sample mean. Central limit theorem. Estimation: Point and Interval estimates of mean, Characteristics of good estimator: small and large sample properties. Simple correlation and regression, Estimation of regression equations of x on y and y on x interpretation of regression coefficients, Multiple regression (introductory), Standard error of an estimate.

**Unit-III: Test of Hypothesis and Significance**

Testing of hypothesis: Type I and Type II errors; Level of significance, Interpretation of P-value Goodness of fit, Confidence intervals and level of significance, One tailed and two tailed tests; Hypothesis testing of means and variance based on Z and t tests Chi-square and F tests; Analysis of variance.
Readings:

Gupta, S.P, Statistical Methods, Sultan Chand, New Delhi.
Nagar and Das, Basic Statistics, Oxford University Press, Delhi.
Lewis, Methods of Statistical Analysis
Unagi, Probability and Statistical Methods
Pillai, R.S.N. Statistical Methods, Sultan & Chand, New Delhi
Syllabus for M.A. Economics

SEMMESTER-I

ECM-1006, Computer Application in Economics-I

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Credits: 02
(Skill Enhancement-Elective)

**Objectives:** This course intends to introduce students with the foundations of computing, programming software used for economic analysis. It is expected to sharpen the analytical and presentation skills of the students with applications which are relevant to economic analysis.

**Course Outcomes:** The students will be able to:

1. Understand the need and role of technology in modern education
2. Know the basics of documentation and presentation tools such as word processing software.
3. Gain knowledge of the basics of economic computing software such as EViews and STATA
4. Use these tools and software in their course
5. Analyse and understand the statistical results

**Module I: Documentation and presentation tools/software**

Getting Started: Motivation; Word: Introduction, Tools and functions,

WORD PROCESSING: Application of word processing - Menus & Tool Bars - Word processor – Creating – Entering - Saving & printing the document - Editing & Formatting Text

PowerPoint Presentation – Menus & Toolbars – Creating presentations: Editing, Formatting – Insertion of Objects and Charts in slides - Custom Animation and Transition

Spread Sheet - Menus & Toolbars - Creating a worksheet - Worksheet to analyse data with graphs & Charts. Advanced tools: Functions – Formulae; Basic Statistical Analysis: Mean. Median, Mode, Correlation

**Module II: Introduction to Eviewsand STATA**

Installation; Errors and help; Managing Data: Importing, Exporting, manipulating data files;
Visual Treat: Basic Graphics- scatter plots, Box plots, Histogram, Density Plots, customisation of graphics; Basic Statistical Analysis: Mean, Median, Mode, covariance, correlation, standard deviation

**References**
Econometrics Textbooks: not an inclusive list
a. Gary Koop, Analysis of Economic Data
b. Damodar N Gujarati, Basic Econometrics

Approved by BOS, Dept. Of Economics and Faculty of Soc. Sciences in its meetings held on 28.08.2019 and 31.08.2019 respectively.
c. Walter Enders, Applied Econometric Time Series
Manuals of R / Eviews / STATA
Syllabus for M.A. Economics
SEMESTER-I
ECM-1011, History of Economic Thought

Credits: 04
(Elective)

Objectives: The subject of History of Economic Thought covers the economic theories of the past and their evolution and development till the present. The study of economic ideas of the past is not only challenging but also enlightening. The paper attempts to make the students of economics acquainted with the evolution of economic ideas as a response to immediate economic problems and policy issues, refining earlier analysis by correcting mistakes and filling in the gaps in the analysis. The subject has shown rapid progress right from the beginning and is showing constant development in the present also.

Course outcome: This course would enable the student to understand how contemporary economics has taken the present shape. After completion of this course students shall be able to:

1. evaluate the contributions of main school of economics
2. analyse the classical economic thought
3. evaluate the historical school of thought
4. analyse the Neo Classical school of economic thought
5. understand economics of welfare and Keynesian and Post Keynesian development approaches

Unit-I: The Classical System

Unit-II: The historical schools

Unit-III: Neo classicism and After
A. Marshall and his system of equilibrium, Economics of welfare: A.C. Pigou, V. Pareto; J. M. Keynes & his theories; Post-Keynesian and Neo-Keynesian approaches.
Readings:

Ricardo, D, Principles of the Political Economy and Taxation, Everymans Library, London.
Roll, E, A History of Economic Thought, Oxford University Press, Kolkata.
Lekachman, Robert, A History of Economic Ideas, Universal Book Stall, Delhi.
Edmund Whittaker, Schools and Streams of Economic Thought, Rand Mc Nally & Company, Chicago.
Syllabus for M.A. Economics

Department of Economics
AMU, Aligarh

SEMESTER-I

ECM-1012, Economics of Infrastructure

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Credits: 04  
(Elective)

**Objectives:** The important role infrastructure plays in a country’s development need not be reiterated. In case of developing countries, lack of adequate infrastructure has been held as a major obstacle to growth. This course explores the economic foundations for public policy analysis related to infrastructural issues. The emphasis of this paper is on concepts and introduction of various tools required for policy analysis and empirical research in infrastructural economics. In particular, the paper aims to deepen students’ understanding of how economic theory can be theoretically and empirically applied to policy problems of infrastructure sector. This paper would also help the students to understand the strength of infrastructure- physical and social in the process of economic development.

**Course Outcome:** The students will be able to:

1. Know the role of infrastructure in growth and development of the country
2. Know the structure of demand and supply of transport; structure of transport cost, etc
3. Understand the primacy of energy in economic development of a country
4. Understand the availability and shortage of energy
5. Generate new alternatives to overcome the crisis of energy

**Unit-I: Introduction**
Infrastructure and economic development; Infrastructure as a public good; Economic characteristics and types - Social and physical infrastructure; Public utilities – Rationale of state provision, Public-private partnership investment in infrastructure, The peak-load-Off-peak load Problem, Marginal Cost Pricing vs. other methods of pricing in public utilities; Dual Principle controversy.

**Unit-II: Transport and communication**
The structure of Transport Costs and Location of Economic Activities. Models of Freight and Passenger Demand. The supply of transport, Pricing policy; Cost Levels and Structure-Road Transport.
Introduction to the setting of postal tariffs; Criteria for Fixation of Postal Tariffs, Cost and Pricing in the telecommunications Industry; Telecommunications in India; New Telecom Policy.

**Unit-III: Energy and Electricity**
**Readings:**


**ADDITIONAL READING LIST**

**Unit I:**

**Unit II:**
Jha, R.M.N. Murty and S. Paul (1990), On Fixing Prices for Postal Services in India, National Institute of Public Finance and Policy, New Delhi.

**Unit III:**
Credits: 04  
(Elective)

Objectives: The objective of this paper is to make the students aware of the importance of population in economic development along with the established theories of population. The paper tries to educate the students the fundamentals of population studies like fertility, mortality, migration, besides the composition of population and its estimation/projection. The issues related to human development have also been incorporated into it. Aspects of population policy in India and study of its social characteristics are other important components of this paper.

Course Outcome: Population studies not only in India but all over world have assumed great significance. These are drawing the attention not only of the social scientists but also of the planners, administrators & policy makers. After completing the course,

1. Students will develop theoretical understanding regarding various demographic changes and analyse the changes in population in India and the world.
2. Will demonstrate an understanding of population dynamics and the changes in mortality, fertility and migration.
3. Students will have better understanding of the relation between population growth and economic development and the way in which it affects the social, economic, cultural and political life of the people.
4. After the completion of the course the students will be able to describe the current status and trends in population size, composition and distribution.
5. They will be able to understand population policy, its formulation and role in the future of the country.
6. The course will serve as a good base for further higher research studies etc.

Unit-I: Fundamentals of Population Studies
Meaning, Nature and Scope of Population Studies
Population Dynamics: mortality (concepts; measurement and determinants of infant mortality), fertility (importance; measures and determinants) and migration (concept and types).
Population composition: Sex, Age, Rural, Urban and Educational Structure
Global variation in population size and growth
Concept of Population Projections; Population Estimates; Uses of Population Projections; Age Pyramids.

Unit-II: Population Growth and Economic Development
Malthus’ theory of Population Growth
Optimum theory of population
Theory of Demographic Transition
Population and Economic Development.
Population, economy and Environment Linkages
Unit-III: Population Growth and policy in India
Population Scenario of India: size and growth; changing pattern of sex ratio in India, age structure of population; infant and child mortality rates; maternal mortality rates, life expectancy.

Trends and Pattern of migration and urbanization in India
Factors responsible for high fertility rate in India
The new population policy
Demographic Dividend in India

Readings:

Bonar, James, Malthus and His Works, macmillan, London
Agarwal S.N, India's Population Problems, Tata McGraw Hill, New Delhi
Govt. of India- Census of India
Chaubey, P.K, Population policy in India, Himalayan Publishing House, Bombay
Srinivasan K, Basic Demographic techniques and Applications, Sage Publication, Thousand Oak
Bonar, James, Malthus and His Works,
Syllabus for M.A. Economics
SEMESTER-I
ECM-1014, Islamic Economics

Max. Marks : 100
Sessional : 30
Exam. : 70

Credits: 04
(Elective)

Objectives:
To make conversant with the theoretical and historical foundations of Islamic Economics.
To provide an understanding of Islamic concepts, principles, theories and tools pertaining to central economic problems.
To build ethical and holistic world-view in dealing with the economic issues.

Learning outcomes:
After the successful completion, the students should be able:
1. To think critically about economic issues from Islamic perspective.
2. To apply the concepts, principles, tools learned to understand and design policies beneficial to humanity.

Unit – I: Basic Concepts and the methodology of Islamic Economics
Origin and development of Islamic economics; Methodology; Tawhid (Oneness) - the central message of Islam and its potential impact on relationships: Man-man, man-environment and man-God; Theoretical foundations; Principles and characteristics; Ethics based economic system; The notion of economic justice; Islamic economics a balance system between capitalism and socialism; Islamic approach to the property right; Economic security in Islam;

Unit – II: Islamic economic approach to problems common to all systems
From family to market; Roles for individuals, families, communities and states; Intra-Family Economic Responsibilities, Inter-Generational Equity through Inheritance; Moderation in Consumption, Encouragement of earning, spending, giving and, by implication, saving and investing; Consumption and consumer behavior; Production preferences; Distribution and re-distribution; Aspects of Islamic public finance and fiscal policy; Zakat and Sadaqa and other forms of taxation in India, Emphasis on Poverty alleviation – role of voluntary institutions; Economic development in Islamic framework; Economic freedom, state intervention and economic policies.

Unit – III: Islamic banking and finance
Interest (riba) and its impact on muslim and non-muslim countries; Exclusion of gambling, excessive uncertainty (gharar), selling debts and some other prohibitions; Principle of Participatory banking and risk-sharing; Rationale of Islamic banking; Controversy over credit creation; Financial instruments: mudaraba, Murabaha, Istisna and Salam; Interface between Islamic and conventional banking; Monetary policy in Islamic system;

Readings:

Approved by BOS, Dept. Of Economics and Faculty of Soc. Sciences in its meetings held on 28.08.2019 and 31.08.2019 respectively.
Abdelhamid Brahimi &KhurshidAhmad(editors) (2009) Encyclopedia of Islamic Economics, 2 volumes, Leicester: The Islamic Foundation
Ahmad, Khurshid (192), "Nature And Significance Of Islamic Economics", in Lectures On Islamic Economics, Irti/IDB.
Zarqa, Mohammad Anas (1992), "Methodology Of Islamic Economics", in Lectures On Islamic Economics, Irti/IDB.

Approved by BOS, Dept. Of Economics and Faculty of Soc. Sciences in its meetings held on 28.08.2019 and 31.08.2019 respectively.
**Syllabus for M.A. Economics**

**SEMMETER-I**

**ECM-1015, Institutional Economics**

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**Credits: 04**  
(Elective)

**Objectives:** This paper aims to explain the role of institutions in economics and the development in the field of institutional economics.

**Course Outcomes:** The students will be able to;

1. Understand the nature and scope of Institutional Economics.
2. To understand the role of institution in Economic Development.
3. Know the market organization as a result of market cooperation.
4. Know the concept of property rights.

**Unit- I: Basic Introduction on Institutional Economics**

Institutional Economics: old and new institutional economics, nature and scope of Institutional Economics, economic growth - natural endowments, technology or institutions? - the relative significance of these factors and their inter-linkages for economic development, Institutional analysis in the works of classical economists – property rights and institutional change - the interrelationship between legal and economic processes: core issues in new institutional economics.

**Unit- II: “New” Institutional Economics and Institutional Change**

The problem of social cost and externalities - transaction cost analysis - theory of property rights - theory of contracts.  
Why do electric industries continue to differ - regulation in a dynamic setting – regulating natural resources: the evolution of perverse property rights. The politics of institutional change in a representative democracy - state failure in weak states - rational individuals versus social dilemmas.

**Unit- III: Markets Firms and State**

Market as organization - market organization as a result of market cooperation - incentive to integrate - limits to integrate - institutional models in the tradition of the neoclassical theory of the State - role of political institutions - political markets.

**Readings:**


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Max. Marks : 100  
Sessional : 30  
Exam. : 70

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Syllabus for M.A. Economics
SEMIESTER-II
ECM-2001, Microeconomics-II

Credits: 04
(Compulsory)

Objectives: This paper of microeconomics aims to provide knowledge to the students regarding various market forms, Equilibrium of firms and industry in different markets, especially in oligopoly. This paper also deals with factor pricing, General equilibrium and welfare economics.

Course outcome: By studying this course students will learn

1. The basic concept of Microeconomics.
2. Its use in day to day life activities.
3. About the market structure for selling and purchasing of goods.
4. About the formulation of policies to regulate the market.

Unit-I:

Classical Oligopoly: Non-collusive oligopoly-Cournot’s Duopoly Model, Bertrand’s Model, Edgeworth’s Model, Chamberlin’s Model, The Kinked Demand model, Stackelberg’s Solution.

Collusive Oligopoly: Cartels; Joint Profit Maximization & Market sharing Cartels; Price Leadership; Low Cost price leader, dominant firm price leader, Barometric price leadership.


Unit-II:


Unit-III:

General equilibrium: interdependence in the economy, the Walrasian system, Existence, uniqueness and stability of equilibrium. Edgeworth Box. Pure exchange model; Equity-efficiency trade off.

Readings:

Koutsyiannis, A, Modern Microeconomics, Macmillan Press, Hong Kong.
Varian, H, Microeconomics Analysis, Viva Book, New Delhi.
Syllabus for M.A. Economics
AMU, Aligarh

SEMESTER-II
ECM-2002, Macroeconomics-II

Credits: 04
(Compulsory)

Course Objectives: This course aims to help students in developing advanced analytical and theoretical skills. It covers a number of standard topics in macroeconomics for developing students’ capacity for strategic reasoning. The module introduces the main theoretical contributions within each set of topics and critically assesses their strength and limitations in the light of the empirical evidence.

Course Outcomes: The student will be able to:
1. Analyse the functional relationship between the large economic aggregates like income, employment, interest rates and the price level.
2. Understand the behaviour of macroeconomic variables in the open economy.
3. Develop the ability to employ the correct macroeconomic tool(s) to explain specific macroeconomic issues and justify policy proposals.
4. Establish the link between the monetary forces and real forces and their developmental role in shaping and influencing macroeconomic objectives of the country.

Unit-I: Theory of Inflation / Business Cycles
Classical, Keynesian and Monetarist approaches to inflation; Demand pull and cost push inflation; Bent Hansen model of demand pull inflation; Structuralist theory of inflation; Phillips curve-Short run and long run; Non Accelerating Inflation Rate of Unemployment (NAIRU); Modified Phillips curve- Friedman, Tobin and Solow; Okun's Law; Strategies to control inflation.
Theories of trade cycles- Samuelson, Hicks, Kaldor and Goodwin’s model; Real business cycle theory.

Unit-II: The Open Economy
IS-LM analysis in open economy; IS-LM curve and balance of trade- Zero capital mobility, Interest rate differentials; Implication of capital mobility for macroeconomic policy; Mundell-Fleming model under fixed and flexible exchange rate, Relative effectiveness of monetary and fiscal policies under imperfect and perfect capital mobility; Marshall-Lerner condition; Inflation and unemployment in open economy.

Unit-III: Macroeconomic Policy Issues
Macroeconomic policy- Meaning and objectives, Targets and instrument, Fixed and flexible target approach, Uncertainty and economic policy, Lags in the effects of policy, Gradualism versus shock therapy, Rules versus discretion; Problem of coordination of macroeconomic policy objectives; Macroeconomic policy in India.
Money-inflation link; Fisher’s equation; Deficits and money growth, Inflation tax; Deficits and debt- Instability of debt financing, Ricardian equivalence.
Readings:
Fleming N, Monetary Economics: Macmillan Studies in Economics.
Bhole, L.M, Impact of Monetary Policy, Himalayan Publishing House, Bombay.
Blanchard, Olivier, Macroeconomics, Pearson Education.

Approved by BOS, Dept. Of Economics and Faculty of Soc. Sciences in its meetings held on 28.08.2019 and 31.08.2019 respectively.
Syllabus for M.A. Economics  
AMU, Aligarh  

SEMESTER-II  
ECM-2003, International Economics  

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<td>Exam</td>
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Credits: 04  
(Compulsory)

**Objectives:** This course introduces students to the principle issues of international trade. The course begins with a brief comparison of the economic status and performance among major trading nations. The course then examines alternative trade theories, protectionism, trade restrictions. Trade policies, trade liberalization, free trade agreements, and labor and capital migration. The course examines international finance, including exchange rates, interest.

**Course Outcomes:** The students will be able to:
1. acquaint with the principles related to international trade;
2. know the paradoxes in international trade theories;
3. familiarise with the case studies based on empirical evidences;
4. understand the concept of measuring various indices revealing specialisation;
5. Know the concepts related to balance of payment;
6. acquaint with the policy measures needed to correct unfavourable situations in BoP;
7. apprehend the reasons behind trade protections ;
8. familiarise with the formation of various trade blocks;
9. capture the distinction between the Static and Dynamic effects of a Customs Union and free trade areas.

**Unit-I: International trade theories**
Theory of International Trade An overview of Classical and Neo-Classical theories of trade; The theoretical implications of the Doctrine; Factor endowments and the Heckscher-Ohlin theory; A case study of H-O hypothesis; Factor Price Equalisation theorem; Stopler-Samuelson and Rybczynski theorem; Leontiff paradox; Other explanations for trade: Availability and Vent for surplus, Theory of overlapping demand, Technological gaps, Product cycle models; Intra-industry trade and its measurement (Balassa index, Grubel-Lloyd index, Aquino index).

**Unit-II: Balance of Payment and Trade Protection**
Balance of Payments and Trade Policy Equilibrium and dis-equilibrium in the balance of payments; Elasticity, absorption, Monetary and Portfolio-balance approach to balance of payments adjustment; Role of Expenditure reducing and expenditure – switching policies in an open-economy; Macroeconomic model under alternative exchange rate regimes, Combining exchange rate adjustments and fiscal policy: Salter-Swan model; Crypto Currency: meaning, nature, relevance and effects. Tariff and Non-Tariff instruments of Trade Policy, Comparison of Tariff and Quota, effects of Tariff: Price effect, Protective effect, revenue effect, redistribution effect, terms of trade effect.
Effects of quotas. Learner's Symmetry, Aggregate Measures of Protection, Nominal and Effective Rate of Protection. Effects of Tariff for Small and Large Countries (Partial Equilibrium Analysis), Effects of Tariff on Distribution of Gains from Trade (General Equilibrium Analysis), the Optimum Tariff, Metzler's Paradox, Domestic Distortions in commodity market in small and large country, Domestic distortion in factor market.

Unit-III: International Trading Organisations and global trading system
World Trade and Theory of Regional Blocks World trade in the 19th and 20th centuries, GATT and trade rounds, Multilateral trading system and the World Trade Organization (WTO) – TRIMS, International trade in services and GATS, TRIPS, Trade and environment, Trade and labour standards, The political economy of protectionism. Types and reasons for economic integration, Theory of custom union, Static and Dynamic effects of a Customs Union and free trade areas; Rationale and economic progress of European Union SAARC/SAPTA and ASEAN, regions; Problems and prospects of forming a Customs Union in the Asian Region; Bilateralism vs. Multilateralism.

Readings:
**Syllabus for M.A. Economics**  
**AMU, Aligarh**  
**SEMESTER-II**  
**ECM-2004, Industrial Economics**

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**Credits:** 04  
*(Compulsory)*

**Objectives:** The subject of Industrial Economics is gaining increasing importance and greater attention in the globalised world. The aim of this paper is to provide knowledge to the students on the basic issues such as pricing policy, efficiency, demand analysis, forecasting, productivity, capacity utilization and the issues involved in the industrial development in India. The objective is to provide a thorough knowledge about Industrial Economics in cogent and analytical manner particularly in the Indian context.

**Course Outcome:**

1. To understand and grasp the basic elements of Industrial Economics
2. To understand the basic framework of industrial economy
3. To evaluate performance of industrial sector of India in the light of the theoretical background.

**Unit-I:**
Subject matter of Industrial Economics. Market structure and behaviour of a firm; Productivity; efficiency and capacity utilization; Concept and Methods of measuring efficiency of a firm, Diversification, Integration and Merger, Industrial finance: Sources, structure, access and institutions.

**Unit-II:**

**Unit-III:**
Separation of ownership and control. Industrial relations: Definition and scope; The economic theory of regulation of Industries. The current measures of regulation of industries in India, Current industrial policy in India, Competition policy, and recent policy initiatives of Government of India.

**Readings:**
Seth N.K, Industrialization in India.

Approved by BOS, Dept. Of Economics and Faculty of Soc. Sciences in its meetings held on 28.08.2019 and 31.08.2019 respectively.
Kuchhal, S.C, Industrial Economy of India, Chaitanya, Allahabad.
Varshney, R.L. & Maheshwary, K.L, Managerial Economics.
Cherunilam, F, Industrial Economics: Indian Perspective Himalaya publishing House, Mumbai.
Chandra, P, Project Preparation, Appraisal, Budgeting and Implementation, Tata McGraw-Hill, New Delhi
Syllabus for M.A. Economics
SEMESTER-II
ECM-2073, Computer Application in Economics-II

Credits: 02
(Skill Enhancement-Elective)

Objectives: In continuation of the course Computer Applications in Economics I, this course intends to introduce students with the computing, programming and problem solving and basic programming skills with R and Eviews.

Course Outcomes: The students will be able to;

1. Understand the basics of computing software R and Eviews.
2. Know the fundamentals of OLS model
3. Use R in the empirical assignments
4. Analyse the empirical works
5. Develop skills for statistical analysis

Module I: Introduction to R

Getting Started: Introduction, Motivation, Installation; Errors and help; Objects in R: Basic calculations and Objects, Vectors and Matrices; Data frames and Data Files: Data Frames, Data Files, Import and Export of Data, Graphics- ggplot2; Basic Statistical Analysis: Mean, Median, Mode, covariance, correlation, standard deviation

Module III: Linear regression and Beyond with Eviews

Revision of concepts of Classical Linear Regression Model (CLRM): Assumptions and Properties of OLS estimator, Violations of assumptions; Basics of Time Series econometrics,

Regression analysis with R: Estimation, Interpretation and Diagnostics

References
Econometrics Textbooks: not an inclusive list
a. Gary Koop, Analysis of Economic Data
b. Damodar N Gujarati, Basic Econometrics
c. Walter Enders, Applied Econometric Time Series
Online courses:
1. Data Science: R Basics – edX
2. Linear Regression and Modeling – Coursera

Max. Marks | 100
---|---
Sessional | 30
Exam. | 70

Approved by BOS, Dept. Of Economics and Faculty of Soc. Sciences in its meetings held on 28.08.2019 and 31.08.2019 respectively.
Syllabus for M.A. Economics
SEMESTER-II
ECM-2011, Rural Economics

Max. Marks : 100
Sessional : 30
Exam. : 70

Credits: 04
(Elective)

Objectives: The course on Rural Development attempts to sensitize students about the dynamics of changes in the rural economy. It includes the study of problems faced by rural population and also includes the critical review of various schemes and projects that benefit the rural population. Emphasis may be laid on the study of rural development as an integral part of overall socioeconomic development.

Course Outcomes: The students will be able to;
1. Know the basic concept of rural economics.
2. Understand the importance of principles and laws of economics in understanding the problems of rural areas.
3. Apply the theories of economics in knowing the dynamics of rural economy.
4. Critically review various policies of rural development.
5. Create the knowledge of rural economy that can be helpful in overall socioeconomic development.

UNIT I:
Rural Economics; Concept, Scope, Objectives and Importance of Rural Economics. Characteristics of Rural Economy; Rural-Urban Linkages. Rural Economy of India; Size and Structure of Rural Economy. Approaches to Rural Development; Regional approach, PURA and PRIs.

UNIT II:
Natural Resources and their importance in Rural Development. Diversification of Rural Economy; Rural Industrialisation. Problems of Rural Economy; Poverty, Unemployment, Inequality, Rural Indebtedness and Farmers Suicide, Infrastructure and Rural Development

UNIT III:
Strategies of Rural Development; Growth oriented strategy, Welfare strategy, Responsive strategy, Holistic strategy, Right-based strategy. Rural Development Programmes; Objectives and Appraisal (SJGSY and MGNREGS). Rural Economy; Diversification as strategy of Development..

Readings:
Dandekar V.M. and Rath . N. – Poverty in India, Indian School of Political Economics, Bombay
Sharma Anju – Dynamics of Agriculture Development, Concept Pub, New delhi
Krishnamurthy V.T. – Community Development in India

Approved by BOS, Dept. Of Economics and Faculty of Soc. Sciences in its meetings held on 28.08.2019 and 31.08.2019 respectively.
Approved by BOS, Dept. Of Economics and Faculty of Soc. Sciences in its meetings held on 28.08.2019 and 31.08.2019 respectively.
Objectives: This course deals with two important components of human resources i.e., education and health. The objective of economics of education is to help students in developing an understanding of the link between the educational system and economic development; planning, financing and cost/benefit of education, educational problems in the context of economic concepts, theories and techniques. Health and health care are dominant economic and political issues in every country of the world. Health economics has emerged as a distinct branch especially within Economics. The objective is to enable the learners how resources are allocated to and within the health economy, and to demonstrate the magnitude and importance of the health sector.

Course Outcomes:
1. Understand the basic concepts of education and health economics.
2. Apply various theories of education and health economics to enhance human resource development.
3. Analyse the current state of human resource development.
4. Evaluate the effectiveness of education and health policies in improving human capital.
5. Create reasoning skills among students to find ways to improve human resource development.

Unit-I:
Economics of education; Nature, definition and scope; Educational production function; Education, productivity and income; Education and economic development; Educational cost-benefit analysis; Returns to education; Human capital and signalling theories of education, Education facilities : Rural-Urban divide; Brain drain in India: Causes and solutions; Significance of vocational education; FDI in Education Industry; New Education Policy.

Unit- II:
Economics of Health-Concept, dimensions and indicators; Determinants of health status; Key health economics concepts; Food and nutrition in India; Out of pocket expenditure: Affordability and access to health care facilities; Burden of disease; Lifestyle related diseases in India: Recent trend; Economic appraisal in Health care-Cost-benefit and Cost effectiveness approaches; Primary health care and health for all; Community health care; Significance of medical pluralism, Women's health and economic development; Health insurance market in India; Climate change and health; Built environment and public health.
Unit-III:

Human Development Index; India’s educational system- Problems and suggestions; Human capital in India; Supply and Demand and the Role of Government in Higher Education in India; Financial Issues in Higher Education; National policy on education and health; Health programmes and infrastructure;;Life table; Health and Education Financing in India; Health status and trend in India; Health care system in India, Health, poverty and economic growth in India.

Readings:

- [http://www.schoolchoices.org/roo/freidl.htm](http://www.schoolchoices.org/roo/freidl.htm).
Department of Economics
AMU, Aligarh

Syllabus for M.A. Economics
SEMESTER-I
ECM-2013, Mathematical Economics

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Credits: 04
(Elective)

Course Objectives: The aim of this course is to introduce students with the Mathematical concepts and methods used to analyse consumer behaviours, producer behaviours and determination of price in various markets. The primary goal is to strengthen student's critical thinking and reasoning skills at planning economic research and to enable them to communicate results effectively.

Course Learning Outcomes: After Successful Completion of this course the students will be able to:
1. Understand the Behavioural Economic Theories concerning to consumer's behaviour and producer's behaviour.
2. Calculate optimal solutions of consumer and producer problems using mathematical skills and theoretical insight.
3. Understand the different types of Market Structures and equilibrium in a market.
4. Analyse the impact of taxes and price controls on market equilibrium.
5. Develop skills to understand the economic concepts and theories which use mathematical tools and techniques in the depth study of economics.

Unit-I: Theory of Consumer Behaviour
Cardinal and ordinal utility; Ordinal utility maximization; Slutsky equation, compensated demand functions, income, substitution, and price effects; Concept of elasticities – generalization to n variable case; homogeneous and homothetic utility functions; Constant elasticity of substitution (CES) utility function; indirect utility functions; Consumer’s surplus; Theory of revealed preference and index numbers; Consumer behaviour under risk and uncertainty.

Unit-II: Theory of Production and Costs
Production function - Short term and long term period; Law of variable proportions; Returns to scale; Economies of scale; Iso-quants; Least-cost combination; Cobb-Douglas, CES, VES and trans-log production functions and their properties; Constrained optimization of a producer; Generalization to n variable case. Euler’s theorem; Technical Progress and production function; Theories of costs – traditional and modern; Derivation of cost function from production function; Empirical uses of production function analysis.

Unit-III: Price Determination in Various Markets
Marginal analysis as an approach to price and output determination; Perfect competition – Short and long term equilibrium of the firm and industry.
Monopoly – short run and long run equilibrium; Price discrimination; Welfare aspects. Monopolistic competition – General and Chamberlin’s approaches to equilibrium of the firm and the group with product differentiation and selling costs.

Readings:

Syllabus for M.A. Economics
SEMESTER-II
ECM-2014, Urban Economics

Credits: 04
(Elective)

Objectives: The objective behind introducing this course is to acquaint the underlying theories, propositions and issues that usually arise in studying an urban situation.

Course Outcomes: The students will be able to;
1. Understand the evolution and concept of urban economics.
2. Know the issues in urban area and the requisite urban planning for them.
3. Comprehend urban infrastructure along with its governance and finance.
4. Analyse the Urban Challenges and its importance.
5. To understand Urban Environmental Problems and its management.

Unit-I: Urbanization and Urban Development
Urban Economics: Concepts and definitions Evolution of urban settlements - a historical perspective, Trends and patterns of urbanization, structure of urban economy, rural urban relation in India and U.P.
Urban Land use and Land Market. Urbanization and Economic Development

Unit-II: Urban Problems and Urban Planning
Urban Planning: Institutions and Policies
Urbanisation: Problems, Pollution and Quality of life,
Urban Transport: Intra-city and intercity problems. Issues relating to port
Urban Environment: Problems of pollutions and its management
Urban and regional growth theories:
Locational aspects of various urban functions: Weberian Location Theory.

Unit-III: Urban Infrastructure and Governance
Urban infrastructure, Development of Urban Infrastructure. Approach to addressing India’s urban challenges
Urban infrastructure and services- specific sectors: Housing, Water supply and drainage, waste management and sanitation
Urban local government and finance - the issue of decentralization

Readings:
Syllabus for M.A. Economics  
SEMESTER-II  
ECM-2015, Gender Economics

Credits: 04  
(Elective)

Objective: The course will introduce the students to economic theories and economic-policy debates from gender perspective. The course will help the students to develop an understanding of the ways in which current economic realities especially in developing countries have different effects on men and women. The course addresses gender inequalities in different economic spheres especially under changing patterns of economic activity and globalisation.

Course Outcome:  
1. It will equip students with an understanding of new conceptualizations that gender analyses gives shape to,  
2. It will make students understand about gender as a social category and its relevance to the study of the economy,  
3. To create an understanding of some of the ways in which the economy is gendered,  
4. After completing of course students will be able to examine in detail issues of Gender in the field of production (formal and informal work).

Unit-I: Economics and Gender Relations:  
Concept and meaning of Gender  
Neo-Classical, Marxian and Feminist economics; Capitalism and gender; Gender and development - issues and approaches;  
Gender Development Index, Gender Action Plan and Millennium Development Goals; sex ratio, health and violence, poverty; Microfinance and gender.

Unit-II: Globalisation and changing patterns of economic activity:  
Gender dimension of economic development; Women access to economic resources; Profiling Women’s work; Informal sector involvement; Working Condition; Wage Differentials;  
Women’s marginalisation in rural employment;  
Gender Division in Urban Labour markets; Labour market segmentation; Barriers to women’s participation in urban modern sector; Gender and Migration; Influence of globalisation on gender differences in economic activity.

Unit-III: Gender and Environment- Conceptual issues:  
Ecofeminism and its various alternatives; Gendered natural resource use and differences in knowledge of environmental issues; Privatisation of common resources and gender; Class-Gender effects.  
Gender roles and environmental concerns at national and local levels; Gendered impact of pollution and natural hazards; Climate change and gender.
Readings:
Momsen, J. (2010). Gender and Development. Routledge, USA.

Websites for reference
www.indiainfoline.com
www.tn.govt.in
www.population.ntm
Objectives: The objective of the paper at the Master’s level would be to sharpen the analytical faculty of the students, by highlighting an integrated approach to the functioning aspects of the Indian economy, keeping in view the scope for alternative approaches. Such an analysis is essential because the Indian economy is a unique amalgam of alternative competing and often conflicting theories and a proper understanding of its working is imperative if the student is to comprehend the ramifications that underlie most of the observed phenomena in the Indian economic set-up. The emphasis of the paper is on overall social, political and economic environment influencing policy decisions. To develop all these themes, the course is divided into specific modules.

Course Outcomes: The students will be able to;
1. Understand the Indian Economic Problems.
2. Analyses the Regional variations and policy implication.
3. To understand the overall agricultural and Economic development.
4. Emphasis the overall social, political and economic environment influencing policy decisions.

Unit-I: An Overview of Indian Economy:
Understanding the Indian Economy; Planning for the economy – objectives, strategy and achievements, Objectives and Functions of NITI Aayog, Growth of GDP and Per Capita Income, Regional Variations, Poverty and Inequality. Approaches to economic development and its measurement- sustainable development, indicators of development- Physical Quality of life index (PQLI) and Human Development index (HDI)

Unit-II: Demographic Features and Resource Base
Broad demographic features of Indian population; Migration-Rural and Urban, Social Infrastructure Sectors; Energy, Education and Health, Public Sector Provision; Reforms; Pricing; Restructuring; Regulations.

Unit-III: The Agricultural Sector
Agricultural Growth and Productivity, Green Revolution and After; issues relating to public and private capital formation in agriculture, Policy for Sustainable agriculture, Food security and PDS, Evaluation of rural credit policies, Financial sector reforms and rural credit, Microfinance-self-help groups and NGO’s, Agricultural Marketing, WTO and Indian agriculture.
Readings:
Syllabus for M.A. Economics
AMU, Aligarh

SEMESTER-III
ECM-3002, Economics of Growth

Credits: 04
(Compulsory)

Objectives: The central purpose of this course is to make students familiar with the principal arguments and results of the theories and models of economic growth that have occupied a prominent place in the economic theorising of the post-war era. The fundamental insights of old and new growth theories will be explained with an emphasis on economics instead of math. However, simple knowledge of calculus is required to accomplish the task. The students will also be made familiar with social cost-benefit analysis, poverty measures and income inequality measures.

Course Outcomes: The students will be able to
1. Know the various concepts and theories of economic growth.
2. Understand the application of theories to the problems of economic growth.
3. Apply the tools and technique to assess the severity of the problems of poverty and inequality.
4. Evaluate the implications of various policies to boost up growth and tackle the problems of poverty and inequality.
5. Suggest new policies to boost up growth and tackle the problems of poverty and inequality.

Unit – I:

Unit – II:
Economic growth and welfare: Concept of optimal growth, Golden rule of accumulation; Convergence: absolute and conditional convergence; Growth accounting, Total factor productivity and the East Asian miracle; Neo-Keynesian Models of Growth: N. Kaldor, L. Pasinetti and Ms. Joan Robinson; Two-Sector Model of Growth; Models of Endogenous Growth – The AK Model, Romer’s Model, Learning by doing.

Unit – III:
Growth and Distribution: Relationship between growth and income distribution, Income distribution in developing countries; Economic inequality: meaning, Criteria for inequality measurement, Measures of income inequality: Lorenz curve, Range, Kuznets ratios, Mean absolute deviation, Coefficient of variation, Gini coefficient; Poverty: conceptual issues, Absolute and relative poverty, Poverty measures: HCR, Poverty gap index, Squared poverty gap index, FGT index, Sen index, Functional impact of poverty;

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Project appraisal: Social cost- benefit analysis, Shadow prices, Little Mirrlees and UNIDO approaches-A comparison, Social rate of discount, Project criterion: single project, project alternatives, Ranking of independent project.

Readings:
Chenery, H.B. et. al. (Eds.), Redistribution with Growth, OUP, London, 1974.
Chakravarti, S, Alternative Approaches to the Theory of Economic Growth, Oxford University Press.
Jones, H.G, An Introduction to the modern theory of Economic Growth, Thomas Nelson and Sons.
Jones, C.I, Introduction to Economic Growth, W W Norton & Co. 2002
A K Sen, On Economic Inequality, OUP, 1999.
Ray Debraj, Development Economics, Oxford University Press, New Delhi, 2019
Syllabus for M.A. Economics

SEMESTER-III

ECM-3003, Public Economics

Credits: 04
(Compulsory)

Objectives: The term ‘Public Finance’ has traditionally been applied to the package of those policies and operations which involve the use of tax and expenditure measures. With the passage of time, the scope of public finance have considerably changed. Analysis of allocative, distributive and stabilizing effects and the Developmental economists’ —Activating finance— changed the character of public finance from a marginal regulator into a major determinant of economic activity. This paper covers this broad spectrum of public sector economy with a view to examining the issues which underline criteria for welfare judgments, theory of public goods, tax incidence, expenditure incidence and issues of federal finance etc.

Course outcomes: This paper will benefit the students by:

1. Acquiring knowledge about efficiency in resource allocation and role of the state in public finance.
2. Making them aware about the political economy and the relevance of voting on budget.
3. Knowing the structure, prospects and progress of GST.
4. Having a knowledge about the structure and growth of public expenditure and the reforms initiated in it.
5. Being aware of the analytical aspects of fiscal policy as well as fiscal federalism.

Unit-I:

Unit-II:

Unit-III:
Structure and growth of public expenditure, Evaluation of Government Expenditure; Reforms in public expenditure programme. Sources of public debt, Debt through created money, Compensatory aspect of debt policy, Burden of public debt, Crowding out of private investment and activity, Principles of debt management and repayment; The sustainability of public debt, Ricardian equivalence.
Analytical aspects of fiscal policy: The government budget constraint (GBC); Incorporating the GBC in IS-LM model; Measurement and determinants of deficits; Fiscal policy rules: types and characteristics; Discretionary fiscal policy changes; Fiscal Federalism: Principles of Multiunit Finance; Theory of Inter-governmental grants.

**Readings:**

B. Mishra, Economic of Public Finance.
Datt, R. & Sundaram, P.K, Indian Economy, Indian Economy.
Grath M., Lectures in Public Economics
Bagchi, Amresh, Readings in Public Finance, Oxford University Press, New Delhi. Taylor
Public Finance,
Finance, Penguin Publication.

Objectives: The objective of this course is to provide a detailed treatment of issues in agriculture economics to those intending to specialize in this area. Starting with the explanation of theoretical questions, the course tries to enhance the students awareness of issues that are relevant to agriculture economics and contemporary debates in the literature and enable them to analyse these issues with basic microeconomics concepts.

Course Outcome
1. Gain knowledge of the agricultural production and productivity
2. Review the various institutional changes in agricultural sector
3. Identify the sources and problems of agricultural credit
4. To evaluate sustainable agricultural development.
5. To understand the agricultural market structure and agricultural Price Policy;

Unit - I: Agricultural Production and Productivity
Transformation of traditional agriculture; Role of agriculture in economic development; Interdependence between agriculture and industry Models of interaction between agriculture and the rest of the economy- Fei-Ranis. Schultz and Mellor model; Agricultural Production function; Factor combination and resource substitution; Supply response of individual crops and aggregate supply; Resource use efficiency in traditional agriculture; Issues pertaining to Biotechnical practices; Sustainable agricultural development.

Unit-II: Institutional Structure
Land tenures and farming system - Peasant, capitalist, collective and state farming; Contract Farming, Tenancy and crop sharing farms, Land reform measures and performance, Problems of marginal and small farmers.
Rural labour supply: interlocking of factor market; Mobility of labour, Agricultural wages in India; Male female wage differences; Rural employment schemes in India.
Application of GIS in Agriculture.
Rural credit: organized and unorganized sectors; Imperfections in rural credit markets in India.

Unit - III: Market Structure and Agricultural Prices
Agricultural markets and marketing efficiency — Market structure and imperfections; Regulated markets; Behaviour of agricultural prices — Cobweb model; State policy with respect to agricultural marketing; Warehousing; Prices; Taxation and crop insurance; Terms of trade between agricultural and non-agricultural prices; Need for state intervention; Objectives of agricultural price policy — Instruments and evaluation; Doubling of Farm Income.
Readings:
Schultz, T.W. : Transforming Traditional Agriculture
Government of India, Five-Year Plans, New Delhi.
Das Gupta, The New Agriculture Technology in India, Macmillan, Madras.
Rao, C. Hanumantha, Agriculture Production Functions costs & Returns in India, Tata McGraw Hills, Delhi.

Approved by BOS, Dept. Of Economics and Faculty of Soc. Sciences in its meetings held on 28.08.2019 and 31.08.2019 respectively.
**Objective**: Applications of economic theory need a reasonable understanding of economic relationship and relevant statistical methods. The econometric methods thus become a very powerful tool for understanding of applied economic relationships and for meaningful research in economics. This paper accordingly is devoted to equip the students with theory of econometrics. We will learn how to construct econometric models, estimate the parameters of these models and interpret the parameters estimates. Many of the methods introduced in this course are also used in business, finance and many other disciplines.

**Course Outcomes**: At the end of this course the students shall be able to:
1. Understand various quantitative techniques to empirically examine the economic theories.
2. Evaluate consequences and find remedial measures if CLRM assumptions are violated.
3. Understand the use of econometric techniques in case of qualitative data.
4. Learn to apply models such as simultaneous equations, (2SLS), (3SLS) models to economic data.

**Unit-I**
Nature, meaning and scope of econometrics; Simple and general linear regression models - Assumptions, Estimation through ordinary least square method(OLS). Properties of estimators; Gauss- Markov Theorem: Concepts and derivation of coefficient of determination (R^2) and adjusted coefficient of determination (R^2)\_adj; Estimation of non-linear equations, Maximum likelihood method. Nature, test, consequences and remedial steps of problems of heteroscedasticity; Multi co linearity and auto-correlation; Specification error; Errors of measurement.

**Unit-II**
Dummy Variable Techniques: Testing structural stability of regression models; Chow test, Comparing two regressions, Interaction Effects, Seasonal analysis, Piecewise linear regression, Use of dummy variables. Regression with dummy dependent variables; the LPM, Logit, Probit and Tobit Models.

Autoregressive and Distributed Lag Models-Koyek Model, Partial Adjustment Model, Adaptive Expectations; Instrumental variables; Problem of Auto-correction- Application; Almon approach to distributed lag models.

**Unit-III**
Simultaneous equation models; Introduction and examples; The simultaneous equation bias and inconsistency of OLS estimators; The identification problem; Rules of identification — order and rank conditions; Methods of estimating simultaneous equation system; Recursive methods and Ordinary least square (OLS); Indirect least squares (ILS); Two stage least square (2SLS), Three stage least square (3SLS).
Readings:

Department of Economics
AMU, Aligarh

Syllabus for M.A. Economics
SEMESTER-III
ECM-3012, Regional Economics

Max. Marks : 100
Sessional : 30
Exam. : 70

Credits: 04
(Elective)

**Objectives:** The study of regions in economics is an old tradition whose value has recently been rediscovered with the advent of economic reforms and more specifically after the emergence of World Trade Organisation (WTO). The new regime of market oriented economy and multilateral trading system left very few options for any central government in terms of planning and therefore the responsibility of planning for economic development falls on the shoulder of state government or local government. The understanding of the various aspects of Regional Economics will strengthen the decision making power of the students.

**Course Outcomes:** The students will be able to;
1. Know the basic concept of regional economics.
2. Understand the importance of principles and laws of regional economics in understanding backwardness of a region.
3. Apply the theories of regional economics in knowing the dynamics of regional development.
4. Critically review various policies of regional development/planning.
5. Create the knowledge for regional planning in the era of globalisation

**UNIT I: Regional Development**

Regional Development: Concepts, Nature and Scope, Theories of Regional Development; E.Hoover, G.Myrdal, A.O.Hirschmann,

**UNIT II: Methods and Techniques of Regional Planning**

Regional Planning: Components, Magnitude and Determinants. Regional Growth; The Export Base Model and Growth as an Internal Process, Structure and Functions of Multi level Planning and Decision Making for Sustainable Development, Analyzing Relationship between Regional Development and Politics.

**UNIT III: Technology and Regional Planning**

Regional Planning Technologies; Remote Sensing (GIS), Geographical Information System (GPS), Global Positioning System (GPS), Information and Communication Technology (ICT); Application of technologies in Regional Planning; Technology based Integrated System of Resource Management, Technology based Urban Planning.
Readings:


Additional Readings:
Hansen, N. M. (1974), Public Policy and regional Economic Development; the Experience in Nine Western Countries, Ballinger, Massachusetts.
Department of Economics
AMU, Aligarh

Syllabus for M.A. Economics
SEMESTER-III
ECM-3013, Financial Economics

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Max. Marks | 100
Sessional  | 30
Exam       | 70

**Objectives:** All modern, developed economies have a sophisticated financial system which incorporates both the financial institutions and financial markets. Over the period of time, the financial system has undergone revolutionary changes and rapid development. Financial markets are becoming ever more complex, offering new types of financial instruments. The demand for experts in the field of financial economics is growing day by day both in the public sector as well as in the private sectors. Therefore, in this light, this course aims to enable the learners in developing an understanding of the financial system in the era of liberalisation, privatisation and globalisation.

**Course Outcomes:** Students will be able to:
1. Understand the basic concepts and theories of financial economics.
2. Apply theories of financial economics to develop financial sector of the economy.
3. Analyse the instabilities linked with financial sector and their likely solutions.
4. Evaluate the effectiveness of financial sector policies.
5. Create analytical skills among students to attain a healthy financial sector.

**Unit-I Financial System**
Genesis and growth of financial economics; Structure of financial system; Role and importance of financial economics in modern world; Functions of financial sector; Equilibrium in financial markets; Money market and its constituents, Capital market-Government securities market, Corporate security market; Primary and secondary market for securities; Analysis of financial markets- Fundamental analysis, Technical analysis; Indicators of financial development; World stock markets- Functioning of stock market; Indian stock markets and role of SEBI.

**Unit- II Investment and Security Market Analysis**
Security analysis- Meaning and types of risk, Concept and types of return, Risk-return trade off; Efficient market hypothesis; Mean-Variance criterion, Measuring risk and return for a single asset and for a portfolio, Portfolio diversification, Portfolio efficiency frontier, Capital market line, Market portfolio, Security market line, Extensions of the CAPM, Performance measures, Arbitrage pricing theory, Multifactor models.

**Unit- III Financial Derivatives**
Derivatives- Meaning, types (Forwards, Futures and Options) and uses; Difference between Forwards and Futures and between Futures and Options, Valuation of Forwards/Futures, valuation of options (Black-Scholes models); Price Discovery; Pricing and valuation of commodity futures: Agricultural, forest and livestock derivatives, crude oil derivatives, base metal derivatives and precious metal derivatives, weather derivatives, carbon derivatives; Commodity and forex derivatives; Derivatives in India, Derivatives markets abroad-Growth and structure; Shortcomings of derivatives.
Readings:

Syllabus for M.A. Economics
AMU, Aligarh

SEMESTER-III
ECM-3015, Economics of Insurance

Max. Marks : 100
Sessional : 30
Exam : 70

Credits: 04
(Elective)

Objectives: Since risk and uncertainty are now central to most of the economic affairs and financial activities, it is utmost necessary for an economics student to understand the vital role of insurance in bringing about stability in such economic transactions. The insurance industry plays a vibrant role in the functioning of the capital market. The Global Economic Recession 2007-08, Climate Change has further enhanced the need and importance of a dynamic insurance sector.

Course Outcomes: The students will be able to:
1. Know the concepts of Insurance
2. Understand the role of insurance in mitigating uncertainty and risk.
3. Analyze the role of institutions for the development of the insurance sector.
4. Evaluate the implications of insurance for different aspects of economy;
5. Develop capability to understand and suggest the policies for the emerging issues in insurance market.

Unit-I: Introduction
Definition of insurance, Fundamentals of insurance, Features of the insurance contract, Social effects of insurance; Insurance procedure, Risk pooling and risk transfer, Classification of life, health and general insurance policies. Insurance & economic development, Insurance institutions as financial intermediaries, Climate change and insurance companies: Sea level rise, Forest fires, Heatwaves; Insurance regulations in India; IRDA: Objectives and Working, Public and Private insurance companies in India

Unit-II: Principles of Insurance
Principle of Insurance (a) Utmost good faith (b) Insurable Interest (c) Indemnity (d) Contribution (e) Subrogation (f) Loss minimization (g) Causa Proxima; Essentials of Insurance contract; Certificate of Insurance- renewal procedure policies; premium claim-arbitration procedure methods of settlement; Principles of underwriting of life and health insurance.

Unit-III: Essentials of different types of Insurance
Life Insurance- features- kinds of insurance policies- premium determination- surrender values nomination assignment- loans- claims procedures- tax benefits; General insurance functions basic principles; Fire insurance- introduction- fire policy- Marine Insurance- essentials- types of policies- marine policy conditions; Miscellaneous Insurance- Home Insurance; Motor Insurance; Aviation Insurance; Burglary Insurance; Flood Insurance; Travel Insurance; Renters insurance; Reinsurance; Rural and micro Insurance.
Readings:


Department of Economics  
AMU, Aligarh

Syllabus for M.A. Economics  
SEMMESTER-III  
ECM-3091, Indian Economic Problems  
(For the students of other departments)

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<th>Max. Marks</th>
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Credits: 04  
(Open Elective)

**Objectives:** The purpose of this paper is to make the students of other disciplines aware about the progress and problems of Indian Economy. Efforts have been made to cover up the utmost issues from past to present.

**Course Outcome:** The students will be able to:
1. Develop ideas of the basic characteristics of Indian economy.
2. Understand progress and changing nature of agricultural sector and its pricing policies.
3. To understand the importance, trends and performance of industrial sector, small-scale industries.
4. Analyse the tax structure and central-state financial relation in India.
5. Analyse various aspects of the external sector like balance of payments, WTO etc.

**Unit-1:**
Basic features of Indian Economy, National income: Trends and Structural changes during the Five Year Plans: Human Development Index India; Demographic dividend; NITI Aayog: structure, objectives and working; Inflation: meaning, causes, consequences and methods to control; Poverty, Inequality and Growth.

**Unit-II:**
Current Status of Indian Agriculture; Agriculture and Science and Technology; Agricultural price policy and the issue of subsidy; Food security & Public Distribution system.  
Industrial Growth: Performance and Problems; Features of New Industrial Policy: Role of MSME; Role of foreign capital for direct investment and portfolio investment; Issues in labour market reform.  
Financial Sector Reforms; Monetary policy of RBI.

**Unit-III:**
Tax structure in India; GST: Concept, features and progress; Centre- State financial relation; Fourteenth Finance Commission: An Assessment; Black money: definition, estimates, and remedial measures, Cashless economy and digital payment systems.  
Balance of Payment: Concept and Components; Features of new trade policy; Impact of WTO on various sectors of Indian economy.

**Readings:**

Approved by BOS, Dept. Of Economics and Faculty of Soc. Sciences in its meetings held on 28.08.2019 and 31.08.2019 respectively.
4. Dutt and Mahajan : India Economy, S. Chand & Company Ltd., 68th Edition
5. Government of India : Economic Survey (latest)

Websites for reference
http://dare.nic.in http://agricoop.nic.in http://planningcommission.gov.in
http://civilaviation.nic.in http://mohfw.nic.in http://www.indianrailways.gov.in
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