### M.Phil Syllabus Semester – I

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<th>Course Type</th>
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<th>Credits</th>
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<td>MA01CECO21</td>
<td>Research Methodology</td>
<td>02</td>
<td>70 /39</td>
<td>30 /17</td>
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<td>03</td>
<td>70 /39</td>
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<td>Agriculture and Indian Economic Growth</td>
<td>03</td>
<td>70 /39</td>
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**Paper Code:** MA01CECO21  
**Title of Paper:** Research Methodology  
**Total Credit:** 02

2. Meaning and Types of Data, Methods and sources of primary and secondary data collection, Sampling techniques, Questionnaires and Schedules, Interview and Observation methods of data collection, Testing of questionnaires- Pilot survey.

**References:**
10. Gupta C.B.; An Introduction to Statistical Methods, Delhi.

References
Elective Group

Paper Code: MA01EECO21  
Title of Paper: Agriculture and Indian Economic Growth  
Total Credit: 03

1. Agricultural sector in India-Changes in its role-production-changes in crop pattern and input structure-causes and consequences-regional variation. Change in consumption pattern and agricultural diversification, efficiency of input use, regional industries and trade, rural employment trends, poverty and employment linkages. Regional inequalities, food security - concepts. status issues & role of state and market.
2. Changes in agrarian structure-causes and consequences regional variations.
3. Agricultural marketing, finance, education, research and extension-progress, problems and prospects, Trends of capital formation in agriculture, Trade liberalization and social welfare.

References
1. John W. Mellor - Economics of Agricultural Development
2. T. W. Schultz - Transforming Traditional Agriculture
3. V. W. Ruttan and Yujiro Hayami - Agricultural Development And International Perspective
4. E. Heady - The Economics of Agricultural Production and Resource use
5. C. E. Bishop & W.D. Tonssaint - Introduction to Agricultural Economic Analysis
6. E. Heady & H. R Jensen - Farm Management Economics.
7. G. S. Shepherd: -Agricultural Price Analysis
1. Introduction, methodology and nature of econometric approach, Introduction to correlation and Simple regression estimation and testing procedures.
2. Functional forms of regression models and methods of estimation; Multiple Variate analysis, generalized estimation methods and problems, Important problems in regression analysis
3. Introduction to time series analysis, multicollinearity, serial correlation, heteroseedasticity; Dummy and qualitative variables.

Reference Books
7. Foster J J, Data Analysis using SPSS for windows-A Beginner, Guide.
8. Madnani G.: Introduction to Econometrics- Principles and Application, Oxford & I B H.
M. Phil Syllabus Semester - II

<table>
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**Paper Code:** MA02CECO21  
**Title of Paper:** Research Methodology  
**Total Credit:** 02

1. Data processing- Editing, Coding, Classification, Tabulation, Analysis, Interpretation and presentation of data, Measures of Central Tendency and Dispersion.
2. Correlation, regression, Hypothesis testing, Use of Computer in research, Bibliography and referencing. Writing a research Report.

**References:**
10. Gupta C.B.; An Introduction to Statistical Methods, Delhi.
1. Role of Agriculture and Industry in Economic Development - Inter relationship between Agriculture and industrial Development.
3. Theory and Practice of Planning in India Special Feature of Planning in India, Evaluation of five year plans, Financial Institutions in India.

References
Elective Group

Paper Code: MA02EECO21
Title of Paper: Agriculture and Indian Economic Growth
Total Credit: 03

2. Institutional factors for agricultural development - agroclimatic regional planning, public distribution systems, land ownership-tenancy and reforms contract farming, processing industries, rural credit institutions, microfinance Evaluation of agricultural Projects.
3. Agricultural Development Programmes and Schemes in India

References
1. John W. Mellor - Economics of Agricultural Development
2. T. W. Schultz - Transforming Traditional Agriculture
3. V. W. Ruttan and Yujiro Hayami - Agricultural Development And International Perspective
4. E. Heady - The Economics of Agricultural Production and Resource use
5. C. E. Bishop & W.D. Tonssaint - Introduction to Agricultural Economic Analysis
6. E. Heady & H. R Jensen - Farm Management Economics.
7. G. S. Shepherd: - Agricultural Price Analysis
1. Definition, components, Generations; Input/output devices: storing information; Types- hardware/software; Microsoft operating systems; windows operating systems; creation, operation and storing of files; editing and formatting; spell and grammar check; creation of tables and columns;
2. Introduction to spreadsheet; creating graphs charts; Mathematical and statistical functions; Data analysis in Excel: descriptive statistics, tests of hypothesis, ANOVA, etc.

Reference Books
7. Foster J J, Data Analysis using SPSS for windows-A Beginner, Guide.
8. Madnani G.: Introduction to Econometrics- Principles and Application, Oxford & I B H.