Semester	VI
Paper Code	
Paper Title	**INPUT-OUTPUT ANALYSIS**
No. of Credits	4
Theory/Practical/Composite	Theory
No. of periods assigned	4
Minimum No. of preparatory hours per week a student has to devote	4
Learning Outcomes/Course description/objective	1. Familiarize students with the concept of inter-industry analysis, 2. Provide insights into national income accounts, price and quantity system equilibrium, 3. Undertake impact and multipliers analysis, 4. Introduce duality theory, 5. Decompose the sources of various changes in the economy, 6. Carry out policy analysis using mixed models, 7. Introduce students to applications of Input-Output Analysis on environment and ecology, 8. Analyse sector-level productivity. 9. Students with exposure to this course will be trained in the basic skills of handling various economy-wide issues.
Syllabus	**Module 1 (35 marks, 2 period per week)** **Introduction and overview:** Basic framework of Input-Output Analysis, Overview of various applications. **Fundamental concepts:** Relationships with National Income accounts and Production Functions, Leontief Inverse, Power series approximation of Leontief Inverse, Open and Closed Models, Price Model. **Multipliers:** Output Multipliers, Income and Employment Multipliers, Value-added Multipliers, Multipliers and Elasticities. **Module 2 (35 marks, 2 period per week)** **Supply-side Models and Linkages:** The Ghosh Model, Re-interpretation of Ghosh model as price model, Linkage analysis, Hypothetical Extraction analysis. **Structural Decomposition and Mixed Models:** Demand-side decomposition, Sources of change, Mixed Models, New-industry Impacts. **Applications**: Basic idea of Energy Input-Output Analysis, Environmental Input-Output Analysis, Regional Input-Output Analysis, Total Factor Productivity Analysis.

<table>
<tr><td>Readings</td><td>1. Ronald E. Miller and Peter D. Blair, Input-Output Analysis – Foundations and Extensions, Second Edition, Cambridge University Press, 2009.
2. Thijs ten Raa, The Economics of Input-Output Analysis, Cambridge University Press, 2005.
3. “Economic Systems Research” – various issues.</td></tr>
<tr><td>Evaluation</td><td>Continuous Internal Assessment: 30 marks End- Semester Theory Examination: 70 marks</td></tr>
<tr><td>Paper Structure for End-Sem Exam</td><td>
<table>
<tr><th>Module</th><th>No. of Questions to be Answered</th><th>No. of Alternatives</th><th>Marks</th></tr>
<tr><td>Module 1</td><td>3</td><td>4</td><td>3 x 5 = 15</td></tr>
<tr><td></td><td>2</td><td>3</td><td>2 x 10 = 20</td></tr>
<tr><td>Module 2</td><td>3</td><td>4</td><td>3 x 5 = 15</td></tr>
<tr><td></td><td>2</td><td>3</td><td>2 x 10 = 20</td></tr>
<tr><td>Total Marks</td><td></td><td></td><td>70</td></tr>
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