



Regulations Relating to Two-year (Four Semester) M.A/M. Sc. Degree Course in Economics attached to the Post Graduate Faculty of Arts, University of Calcutta [Revision 2022]

In exercise of the powers conferred by section 54 of the Calcutta University Act, 1979, the Syndicate of the University hereby makes the following Regulations, namely:

General Conditions:

1. These Regulations may be called the University of Calcutta Regulations, 2022, relating to Two Year (Four Semesters) M.A./M Sc. Degree Course of Studies in Economics. It shall apply to every candidate prosecuting the above courses in this University. Notwithstanding anything contained in any Regulations or Rules for the time being in force the study for the above course shall be guided by these Regulations. These Regulations shall come into effect from the academic session 2022-23.
2. To be considered for admission to M.A./M.Sc. Economics course of studies a candidate must have obtained B.A./B.Sc. degree with Economics Honours or equivalent.
3. Candidates having B.A. degree shall get M.A. degree and those with B.Sc. degree shall be awarded M. Sc. degree after successful completion of the course.
4. The M.A./ M.Sc. Examination in Economics shall be held in four semesters.
5. A candidate must pass the entire M.A./M.Sc. examination consisting of four semesters within a maximum of four consecutive years with reference to the date of first admission to qualify for the degree.
6. In each academic year there shall be two semesters, ordinarily starting at July and January respectively. July-December session will comprise First and Third Semesters. January-June session will comprise Second and Fourth Semesters.
7. The First and Third Semester examinations shall be held ordinarily in November/ December and the Second and Fourth Semester examinations shall be held in May/ June of each academic year.

Course Structure:

8. The M.A./M Sc. Degree Course of Studies in Economics shall have three types of courses: (a) Core Courses, (b) Discipline-specific Elective Courses, (c) General Elective Courses.
9. For successful completion of M.A./M Sc. Degree Course of Studies in Economics, each candidate has to take 20 courses and successfully complete each course.
10. Among the 20 courses, a candidate must successfully complete, there shall be 12 Core Courses, 6 Discipline Specific Elective Courses (from three separate Fields of study shown in groups A, B and C) and 2 Generic Elective Courses.



11. New Fields may be added in each group from time to time as recommended by the Post Graduate Board of Studies in Economics subject to the approval of the Faculty Council and Syndicate

12. In each Semester, a candidate has to take five courses.

13. Each Semester shall be of 250 marks and the entire M.A./ M.Sc. curriculum shall be of 1000 marks.

14. There shall be three types of papers: (a) Theory papers, (b) Practical papers, and (c) Group projects.

15. For each paper, in each semester there will be internal assessment. For all Theory papers the final grade will be 20% internal assessment and 80% end-semester evaluation. For each Practical paper and the Group Project the final grade will be 40% internal assessment and 60% end-semester evaluation.

16. The First Semester will comprise of five Core Courses (CC) of 50 marks each (CC1, CC2, CC3, and CC5 will be fully theory of 50 marks each and CC4 will be partly theory with 30 marks and partly practical with 20 marks). The Second Semester will cover five Core Courses of 50 marks each (CC6, CC7, CC9, CC10 will be fully theory of 50 marks each and CC8 will be partly theory with 30 marks and partly practical with 20 marks). The Third Semester will include one Core Course (Group Project I) of 50 marks, and three Discipline Specific Elective Courses (one from each field offered for that particular academic session) of 50 marks each and one Generic Elective Course (GE I) of 50 marks. The Fourth Semester will contain one Core Course (Group Project II of 50 marks), three Discipline Specific Elective Courses (one from the same field as in Semester Three) of 50 marks each and one Generic Elective Course (GE II) of 50 marks. DSE 17 in Semester III and DSE 18 in Semester IV will be partly theory with 30 marks and partly practical with 20 marks in each. DSE 19 in Semester III and DSE 20 in Semester IV will be partly theory with 25 marks and partly practical with 25 marks in each.

Eligibility requirement:

17. A candidate shall be eligible for admission to a semester examination provided he has attended a regular course of studies for that semester and has attended at least 65% of the total number of Theoretical, Practical and Project classes separately held during the semester.

Condonable Limit

A student who has attended at least 55% of the classes but less than 65% of the classes shall, however, be eligible to appear in the examination upon obtaining condonation order from the Vice-Chancellor and payment of requisite short percentage fee as may be prescribed by the University from time to time.



18. A candidate attending less than 55% of the classes shall not be allowed to sit in the examination. Such candidates shall be allowed to take fresh admission in the same semester in the following academic session and this opportunity of readmission cannot be availed of more than once during the entire tenure of studentship.

Evaluation Scheme:

19. For all theory papers the evaluation would be done on the basis of internal assessment carried out during the semester and written examinations to be held at the end of the semester. Internal assessment will have 20% weight and end-semester written examination will have 80% weight.

20. For all Practical Papers the evaluation shall be done in two parts: (a) continuous evaluation of 40% to be done during the session as internal assessment and (b) a practical examination of 60% to be taken at the end of the Semester.

21. The Group Projects shall be partly evaluated (40 %) by the internal teachers during the semester and partly evaluated (60 %) by a board of External Examiners at the end of the Semester.

22. It shall be compulsory for candidates to clear each Course of the programme to qualify for the degree.

23. To clear a Course, a candidate shall have to get at least 40% marks. This is applicable to each of the theoretical and practical Courses including Group Projects. If a Course of 50 marks contains both theory (30 marks) and practical (20 marks) then a candidate has to secure at least 40% marks in each part separately.

24. A candidate securing 60% or more marks in aggregate shall be placed in the First Class and the ones with at least 40% but less than 60% marks in aggregate shall be placed in the Second Class. A candidate with less than 40% of marks in aggregate shall be declared unsuccessful.

25. There shall be no provision of improvement for candidates having already qualified for any particular paper. However, a candidate may apply for re-examination of the Theory Courses. No such option shall be available for the Practical Courses and the Group Project.

26. Re-examination of only one theoretical Course per semester shall be allowed for the candidates appearing at a semester examination as a whole provided he has secured at least 40% marks in rest of the Courses of that Semester examination.

27. If a student is unsuccessful in any Theory or Practical Course in a Semester he will be eligible to appear in the supplementary examination in the two immediately subsequent Semesters subject to the fulfillment of clause 5.

28. The first supplementary examination shall be held along with the following end-semester examination and the second supplementary examination shall be held with the subsequent end-semester examination.



29. If a candidate does not enrol or does not appear at the examinations or fails to secure pass marks in any paper(s) at the concerned examinations will be allowed to attend the classes in the next higher semester

A candidate may continue for the next higher Semester without appearing at the lower End Semester Examinations

A candidate who fails to secure pass marks in one or more papers in 1st and 2nd semester may appear in those paper(s) when the concerned End Semester Examinations will be held next.

If a candidate fails to secure pass marks in 3rd and / or 4th End-semester examinations, he/she will get a chance to appear in the supplementary examinations to be held after 3 months of the publication of results of 4th semester examinations.

A candidate has to clear the entire course within 4 years from the year of first admission in that course

30. If a candidate sits in any supplementary examination, continuous evaluation/ internal assessment marks awarded in the first chance would be retained for the second and the subsequent chance.

31. In case of a candidate asking for re-examination of a Course that combines both theoretical examination and practical examination, the mark obtained in the practical examination would be retained and that of the theoretical examination would only be re- examined.

32. In case of a candidate failing a Course in aggregate that combines both written end term examination and practical, the marks obtained in the part in which he has obtained the qualifying marks, if any, would be retained and the part in which he has disqualified would only be allowed to be repeated.

33. If any candidate becomes unsuccessful in the Group Project then he would have the option of submitting a term paper as Individual Project only in the subsequent semester. For this paper there will be only one chance available to the candidate subject to the fulfillment of clause 5.

34. A candidate unsuccessful in Group Project and subsequent Individual Project shall have to leave the course and shall be dropped from the roll.

35. For each Course (theory and practical), except Group Project, a student shall be allowed three chances (including the regular one) subject to fulfillment of clause 5. Absence in a paper in the examination or not enrolling for the examination itself shall be treated as one missed chance.

36. In case of inability to appear at the supplementary examination, a candidate shall be considered losing a chance. If one loses both the chances then he will be declared unsuccessful.



37. A student who is unsuccessful in a minimum of one paper having availed him of all the stipulated chances shall be dropped from the rolls of the University.

38. To be entitled for award, rank, and medal, a candidate must complete and qualify in all papers in each semester in first available chance.

Examiners:

39. A Board of Examiners shall be appointed to conduct each semester examination following the recommendation of the Board of Post Graduate Studies in Economics.

40. The paper setter for every theoretical and practical Course shall be of one internal examiner appointed on the recommendations of the Board of Post Graduate Studies in Economics.

41. Evaluation of the answer scripts shall be ordinarily done by the respective paper- setters of the concerned papers.

42. For the assessment of Group Projects the Board of Evaluators shall consist of three external examiners appointed on recommendation of the PG Board of Studies. The Board shall recommend a consensus grading out of 30 marks and the rest 20 marks will be the internal assessment. The same practice will be followed to evaluate Individual Project.

43. A candidate shall have to pay fees for both theory and practical papers for each semester as per the rates specified by the University.

44. Duration of examination of each theoretical paper of more than 20 marks and up to 40 marks shall be 2 hours and that of 20 marks or less would be 1 hour.

45. Duration of examination for each practical paper of more than 20 marks shall be 2 hours and less than 20 marks would be 1 hour.

46. The detail course structure and syllabus are laid down here under.



Course Structure of Two-year (Four Semester) M.A/M. Sc. in Economics under CBCS

Semester-I (20 credits, 250 marks)

Paper No	Course No.	Name of the Course	Type of Course	Total Credit	Total Marks
I	CC1	Microeconomics I	Core	4	50
II	CC2	Macroeconomics I	Core	4	50
III	CC3	Mathematical Methods in Economics	Core	4	50
IV	CC4	Econometrics - I	Core	2 (Th)+2 (Pr)	30 (Th)+20 (Pr)
V	CC5	Advanced Indian Economics	Core	4	50

Semester-II (20 credits, 250 marks)

Paper No	Course No.	Name of the Course	Type of Course	Total Credit	Total Marks
VI	CC6	Microeconomics II	Core	4	50
VII	CC7	Macroeconomics II	Core	4	50
VIII	CC8	Econometrics- II	Core	2 (Th)+2 (Pr)	30 (Th)+20 (Pr)
IX	CC9	Development Economics	Core	4	50
X	CC10	History of Economic Ideas	Core	4	50

Semester-III (22 credits, 250 marks)

Paper No	Course No.	Name of the Course	Type of Course	Total Credit	Total Marks
XI	GE1	Development Studies	GE	4	50
XII	CC11	Group Project-I	Core	6	50
XIII	DSE	One Course from Group-A*	DSE	4	50
XIV	DSE	One Course from Group-B**	DSE	4	50
XV	DSE	One Course from Group-C***	DSE	4	50



Semester-IV (22 credits, 250 marks)

Paper No	Course No.	Name of the Course	Type of Course	Total Credit	Total Marks
XVI	GE2	Indian Economics	GE	4	50
XVII	CC12	Group Project-II	CC	6	50
XVIII	DSE	One Course from Group-A\$	DSE	4	50
XIX	DSE	One Course from Group-B\$\$	DSE	4	50
XX	DSE	One Course from Group-C\$\$\$	DSE	4	50

Discipline Specific Elective Courses for Semester III

Group A*

Paper No	Course No.	Name of the Course	Type of Course	Total Credit	Total Marks
XIII (1)	DSE 1	Advanced Macroeconomics I	Discipline Specific Elective	4	50
XIII (2)	DSE 3	Game Theory and Information I	Discipline Specific Elective	4	50
XIII (3)	DSE 5	International Economics I	Discipline Specific Elective	4	50
XIII (4)	DSE 7	Urban Economics I	Discipline Specific Elective	4	50
XIII (5)	DSE 9	Economics of Industry I	Discipline Specific Elective	4	50
XIII (6)	DSE 11	Public Economics I	Discipline Specific Elective	4	50
XIII (7)	DSE 13	Behavioural Economics I	Discipline Specific Elective	4	50
XIII (8)	DSE 15	Social Economics I	Discipline Specific Elective	4	50



Group B**

Paper No	Course No.	Name of the Course	Type of Course	Total Credit	Total Marks
XIV (1)	DSE 17	Advanced Econometrics I	Discipline Specific Elective	2 (Th)+2 (Pr)	30 (Th)+20 (Pr)
XIV (2)	DSE 19	Operations Research I	Discipline Specific Elective	2 (Th)+2 (Pr)	25 (Th)+25 (Pr)
XIV (3)	DSE 21	Money and Finance I	Discipline Specific Elective	4	50
XIV (4)	DSE 23	Economics of Institutions I	Discipline Specific Elective	4	50
XIV (5)	DSE 25	Political Economy of Development I	Discipline Specific Elective	4	50
XIV (6)	DSE 27	Development Management I	Discipline Specific Elective	4	50
XIV (7)	DSE 29	Experimental Economics I	Discipline Specific Elective	4	50
XIV (8)	DSE 31	Economics of Innovation I	Discipline Specific Elective	4	50

Group C***

Paper No	Course No.	Name of the Course	Type of Course	Total Credit	Total Marks
XV (1)	DSE 33	Labour Economics I	Discipline Specific Elective	4	50
XV (2)	DSE 35	Economics of Agriculture I	Discipline Specific Elective	4	50
XV (3)	DSE 37	Urban Planning I	Discipline Specific Elective	4	50
XV (4)	DSE 39	Health Economics I	Discipline Specific Elective	4	50
XV (5)	DSE 41	Resource & Environmental Economics I	Discipline Specific Elective	4	50



XV (6)	DSE 43	Marxian Economics I	Discipline Specific Elective	4	50
XV (7)	DSE 45	Gender Economics I	Discipline Specific Elective	4	50

Discipline Specific Elective Courses for Semester IV

Group A\$					
Paper No	Course No.	Name of the Course	Type of Course	Total Credit	Total Marks
XVIII (1)	DSE 2	Advanced Macroeconomics II	Discipline Specific Elective	4	50
XVIII (2)	DSE 4	Game Theory and Information II	Discipline Specific Elective	4	50
XVIII (3)	DSE 6	International Economics II	Discipline Specific Elective	4	50
XVIII (4)	DSE 8	Urban Economics II	Discipline Specific Elective	4	50
XVIII (5)	DSE 10	Economics of Industry II	Discipline Specific Elective	4	50
XVIII (6)	DSE 12	Public Economics II	Discipline Specific Elective	4	50
XVIII (7)	DSE 14	Behavioural Economics II	Discipline Specific Elective	4	50
XVIII (8)	DSE 16	Social economics II	Discipline Specific Elective	4	50
Group B\$\$					
Paper No	Course No.	Name of the Course	Type of Course	Total Credit	Total Marks
XIX (1)	DSE 18	Advanced Econometrics II	Discipline Specific Elective	2 (Th)+2 (Pr)	30 (Th)+20 (Pr)
XIX (2)	DSE 20	Operations Research II	Discipline Specific Elective	2 (Th)+2 (Pr)	25 (Th)+25 (Pr)
XIX (3)	DSE 22	Money and Finance II	Discipline Specific Elective	4	50
XIX (4)	DSE 24	Economics of Institutions II	Discipline Specific Elective	4	50
XIX (5)	DSE 26	Political Economy of Development II	Discipline Specific Elective	4	50
XIX (6)	DSE 28	Development Management II	Discipline Specific Elective	4	50
XIX (7)	DSE 30	Experimental Economics II	Discipline Specific Elective	4	50
XIX (8)	DSE 32	Economics of Innovation II	Discipline Specific Elective	4	50



Group C\$\$\$

Paper No	Course No.	Name of the Course	Type of Course	Total Credit	Total Marks
XX (1)	DSE 34	Labour Economics II	Discipline Specific Elective	4	50
XX (2)	DSE 36	Economics of Agriculture II	Discipline Specific Elective	4	50
XX (3)	DSE 38	Urban Planning II	Discipline Specific Elective	4	50
XX (4)	DSE 40	Health Economics II	Discipline Specific Elective	4	50
XX (5)	DSE 42	Resource & Environmental Economics II	Discipline Specific Elective	4	50
XX (6)	DSE 44	Marxian Economics II	Discipline Specific Elective	4	50
XX (7)	DSE 46	Gender Economics II	Discipline Specific Elective	4	50

Syllabus Detail



Semester I (20 credits, 250 marks)

Core Course (CC1)-Microeconomics-I

Paper I

Course Credit -4

Total Lecture Hours: 50

Full Marks: 50

1. Consumer Behaviour

[Lecture Hours 18]

- Revision of basic ideas : duality approach to consumer behaviour, expenditure function, indirect utility function, consumer surplus, equivalent and compensating variation, revealed preference theory
- Choice under uncertainty: the lottery space, axioms related to lottery space, certainty equivalent income, risk premium, absolute and relative measures of risk aversion, concept of fair bet, state contingent indifference curve, economics of insurance and choice under uncertainty, the insurance decision, demand for insurance, risk spreading, the Arrow-Lind Theorem.

2. Production and Costs : Theory of Firm and the Competitive Market

[Lecture Hours 14]

- Revision of basic ideas of production and costs : homothetic and homogeneous production functions, cost equation and cost function, profit function, envelope theorem and its applications, duality in production and costs, Hotelling's Lemma and Shephard's Lemma, constant returns to scale, unit isoquant and envelope theorem, unit isoquants and Shephard's lemma, elasticity of substitution under CRS, implications for competitive equilibrium.
- Production under uncertainty: competitive firm under uncertainty, price uncertainty and comparison with certainty case, the risk neutral firm and the risk averse firm, price and technological uncertainty, production with future markets.

3. Imperfect Markets

[Lecture Hours 8]

- Monopoly : price discrimination, durable goods monopoly, pricing tactics : two-part tariff and peak-load pricing
- Monopolistic competition: love for variety and equilibrium under monopolistic competition, extended model of monopolistic competition using Dixit-Stiglitz (1977) utility function, location models: the linear approach and the circular approach.

4. General Equilibrium and Welfare : Part I

[Lecture Hours 10]

- The exchange economy: equilibrium (existence, uniqueness and stability), Brouwer's Fixed Point Theorem and Existence Theorem, Pareto optimality, the concept of core, competitive equilibrium and core allocation. The First and the Second Fundamental Theorems of Welfare Economics, social welfare optima, relation between fundamental theorems and the core.
- The production model: fixed and flexible coefficients, relation between endowments and product mix, relation between commodity prices and factor prices.



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- MasCollel A., Whinston M. D. and Green J. R. (2012) - Microeconomic Theory, Oxford University Press, India
- Gravelle, H. and Rees, R.(2004) –Microeconomics, 3rd Edition, Prentice Hall
- Jehle G. A. and Reny P. J. (2006) – Advanced Microeconomic Theory, 3rd Edition, Pearson Education, India
- Tirole, J. (1988) : The Theory of Industrial Organization, The MIT Press
- Oz Shy (1995) : Industrial Organization : Theory and Applications, The MIT Press
- Dixit, A. and Stiglitz, J.E. (1977) : ‘Monopolistic Competition and Optimum Product Diversity’, *The American Economic Review*, vol 67, No.3, 291-308



Core Course (CC2)-Macroeconomics-I

Paper II

Course Credit -4

Total Lecture Hours: 50

Full Marks: 50

Circular flow between aggregate demand and aggregate expenditure: A supply side approach and demand side approach. (4 hours)

Introduction to supply based models: wage-price flexibility and voluntary unemployment. (4 hours)

Demand based models: Relative wage hypothesis and constant money wage - Effective demand with money wage rigidity and involuntary unemployment. (14 hours)

Uncertainty and expectation in macroeconomics: Keynesian Uncertainty, Adaptive expectation, Rational expectation; Feedback policy and Optimal Policy; Lucas critique and micro-foundation (14 hours)

Economics of Growth: Solow model, Convergence debate, Ramsey-Cass-Koopman's optimal growth model, Diamond's overlapping generation model, Endogenous growth models - AK model, Romer model and Lucas model. (14 hours)

References:

Hicks, J. The Social Framework: An Introduction to Economics. Oxford University Press.

Bhaduri, A. Macroeconomics: The Dynamics of Commodity Production. Palgrave Macmillan

Keynes J.M. The General Theory of Employment, Interest and Money. Palgrave Macmillan. (Chapters 1-4, 8-10, 19-21)

Davidson, P. Post Keynesian Macroeconomic Theory; A Foundation for Successful Economic Policy in the Twenty-first Century, Aldershot, England, Edward Elgar Publishers.

Sheffrin, S.M. Rational Expectations. Cambridge University Press.

Lucas, R. E., and T.J. Sargent, editors. Rational Expectations and Econometric Practice: Volume 1 and Volume 2. University of Minnesota Press, 1981. (Selected articles)

Romer, D. Advanced Macroeconomics, McGrawHill.

Barro, R.J. and Xavier Sala-i-Martin. Economic Growth, MIT Press.



Core Course (CC3) - Mathematical Methods in Economics

Paper III

Course Credit -4

Total Lecture Hours: 50

Full Marks: 50

1. **Real Analysis:** Preliminaries-Functions and their Properties, Countability, Order Relations; Metric Spaces: Definition & Properties; Pseudometric Spaces, Open Sets, Closed Sets, Bounded Sets, Linear Space, Convex Sets, Convex Cones, Compact Sets, Fixed Point Theorem and its Economic Application

[Lecture hours10]

2. **Nonlinear Programming:**

- a. Review of Classical Constrained Programming, Concave

Programming, Quasi-Concave Programming

- b. Weistrass' Theorem, Local-Global maximum, minimum, Local-Global Theorem, Generalised Envelope Theorem, Comparative Statics

- c. Saddle Point Theorem, Constraint Qualifications

[Lecture hours10]

3. **Linear Models, Vector Analysis, Matrix Algebra**

- a. Linear Models and Matrices, Matrix Operation, Scalar Valued

Functions defined on Matrices, Quadratic Forms

- b. Symmetric Square Matrices, Frobennius Theorem, Dominant Diagonal Matrices

[Lecture hours10]

4. **Ordinary Differential Equations and Stability:**

0. Trajectories, Concept of Stability, Stable Manifold, Saddle Point Equilibria

1. Asymptotic Stability, Liapunov Stability

2. Stability of a large time-invariant system: Hurwitz test, Liénard–Chipart stability criterion

3. Linear Phase Diagrams

[Lecture hours10]

5. **Optimal Control Theory:**

0. Hamiltonian function, Necessary and Sufficiency Condition

1. Transversality Condition

2. Finite and Infinite Horizon Problems

3. An application of optimal control theory

[Lecture hours10]



References:

A. Texts:

1. Dixit, A (1976): Optimisation in Economic Theory, OUP
2. Hoy.M, Livernois, McKenna, Rees, Stengos (2012): Mathematics for Economists, MIT Press (Indian reprint, PHI)
3. Intriligator, M (1971): Mathematical Optimisation and Economic Theory , SIAM (Indian reprint, PHI)
4. Takayama, A (1973): Mathematical Economics, CUP
5. Chiang, A (1992): Dynamic Optimisation, McGrawHill Inc.

B. References:

1. Beavis, B and Dobbs, I.M (1990): Optimisation and Stability Theory for Economic Analysis, CUP
2. Mukherjee, A and Guha, S (2011): Mathematical Methods and Economic Theory, OUP
3. Simmons, G. F. (1963) Introduction to Topology and Modern Analysis (New York: McGraw-Hill).
4. Ok, Efe A (2007) Real Analysis with Economic Applications. Princeton, NJ: Princeton University Press.



Core Course (CC4): Econometrics– I

Paper IV

Course Credit – 4 (Theory 2+Practical 2)

Total Lecture Hours: 54

Full Marks 50 (Theory 30+ Practical 20)

Paper IV (Group A): Theory 30 Marks

1. General linear model (matrix approach)
 - Specification
 - Properties,
 - Estimation (Method of moments, Ordinary least square, Method of maximum likelihood)

[Lecture hours 4]
2. Endogeneity in static models
 - Sources (Omitted variable, Measurement error, Simultaneity)
 - Estimation (Method of instrumental variables (IV), Generalised Least Squares (GLS), Two-stage least squares (2SLS), Generalised method of moments GMM)
 - Testing of hypothesis

[Lecture hours 12]
3. Qualitative and limited dependant variable models
 - Linear probability model
 - Logit model
 - Probit model
 - Tobit model
 - Heckman's selection model

[Lecture hours 10]
4. Multivariate Analysis (basic concepts)
 - Principal Component Analysis,
 - Factor Analysis,
 - Cluster Analysis,
 - Multivariate Regression Model

[Lecture hours 8]

Paper IV (Group B): Practical (20 marks)

- [Lab class hours 20]
1. Econometric software- Stata / R: Basic discussion
 2. Linear regression model – diagnostic checking (heteroscedasticity, autocorrelation, multicollinearity, endogeneity): Estimation of Cobb- Douglas, CES, Translog functions
 3. Binary response model – logit and probit model: Estimation job selection model, choice of schooling
 4. Principal component – factor analysis: construction of composite index (HDI)



References:

- Das, P. (2019), *Econometrics in Theory and Practice - Analysis of Cross Section, Time Series and Panel Data with Stata 15.1*, Singapore, Springer
- Greene, W. H. (2012). *Econometric Analysis* (Sixth ed.). Upper Saddle River: Pearson
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- Maalouf, M. (2011) Logistic regression in data analysis: An overview. *International Journal of data Analysis Techniques and Strategies*, 3: 281-299.
- Nakamura, A. and M. Nakamura (1998). Model specification and endogeneity. *Journal of Econometrics*, 83
- Rencher, A. C. (1998) *Multivariate Statistical Inference and Applications*. New York: Wiley.
- Stock J, Watson MW. (2003) *Introduction to Econometrics*. New York: Prentice Hall.
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- Wooldridge, J.M. (2007) Lecture Notes 10, http://www.nber.org/WNE/lect_10_diffindiffs.pdf
- Wooldridge, J.M. (1994). A simple specification test for the predictive ability of transformation models, *Review of Economics and Statistics*, 76: 59–65.



Core Course (CC5): Advanced Indian Economics

Paper V

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. **Crisis of Indian Economy** in the late 1980s and the New Economic Policy.

Opinions of Prof Sukhamay Chakravarty and Prof Jagadish Bhagwati

(Lecture hours 2)

2. **Transformation of the Indian Economy in the post-liberalisation period**

a. Structural Change

Changes in the Indian Economy – colonial legacy- inward looking growth process with import substituting industrialization- Green Revolution and modernization of agriculture-Bank Nationalisation and expansion of Financial Sector- Export promotion- Technical upgradation and opening of the Economy –Dominance of the Service sector with IT and ITeS – Demographic and Occupational Change

[Lecture hours 6]

b. Sectoral Changes

i) Agriculture – from lowly productive backward farming to subsidized high productivity model- change in the agricultural sector by farm size and farmer typology- liberalization and gradual withdrawal of subsidy – changes in cropping pattern- regional variation- diversification and commercialization of agriculture; Agriculture-industry linkage – recent debates around Farmers’ law;

ii) Industry –industrialization model based on the dominance of public sector- liberalization and dismantling of license-permit-raj- privatization and the opening up-import substitution to export promotion- duality in the manufacturing sector- changing composition of Indian manufacturing sector- relative stagnation of the manufacturing sector-role of MSME- privatization and disinvestment- recent changes in labour laws;

iii) Service Sector- slow growth of the service sector in post-independence period- spectacular growth in the liberalized regime- changes in the composition of service sector- IT and ITeS revolution- Service sector and trade- Service sector model of growth;

[Lecture hours 6]

3. **Growth, Poverty and Inequality**

Regional Growth and Inequality

a. Imbalance in regional development as colonial legacy- corrective measures in the Plan period – role of Planning Commission and Finance Commission.

b. Liberalisation and the Convergence Hypothesis – performance of the states in the post-liberalisation period- causes and consequences;

c. Federal Structure of the economy – changing role of Finance Commission-introduction of Goods and Services Tax and its consequences;

d. Poverty – debates about measurement – policies for poverty eradication- poverty reduction in urban and rural areas- determinants and consequences; Polarisation and its relationship with income inequality and other diversities (ethnicity and religion);

[Lecture hours 6]



4. Limitations of Growth Logic: Inclusive Growth

a. Food Security

Definitions and Paradox of Food Security in India, Universal and Targeted Public Distribution System, Government Measures, Scope and impact of some remedial measures, Technological help, Sustainable Development Goals and food Security, Supplementary Programme for nutrition, Effectiveness and Failure of Food Security, National Food Security Act.

(Lecture hours 8)

b. MGNREGA

Mandate, Goals, Coverage, Paradigm Shift of MGNREGA, Formulation of Employment Guarantee Schemes, Key Stakeholders, Objectives of MGNREGA, Features of MGNREGA, Some Modifications over time, Women's participation with special reference to West Bengal, Impact on income and asset creation.

(Lecture hours 6)

c. Urban Livelihood Mission– Aims, Scheme benefits and highlights

(Lecture hours 2)

5. Globalization and Regional Trade Blocs

Introduction to Globalization and Regional Trade Blocs, Regional Trade Blocs and India with special reference to SAARC and ASEAN, Composition of ASEAN, ASEAN –India Framework Agreement on Comprehensive Economic Cooperation (brief), Composition of India-ASEAN bilateral trade, ASEAN-India FTA in Goods (agricultural, manufacture in brief), India's trade relation with ASEAN countries: Recent trend and prospects(in brief), Composition of India's bilateral trade with ASEAN countries, Industrial level effect for India's imports from ASEAN..

(Lecture hours 8)

6. Recent Changes in the Economy

a. Demonetisation and its impact

b. Pandemic and recent slowdown

[Lecture hours 6]

References

1. EPW, Vol 52(2), 14th June, Jan 2017
2. A Roadmap for Sustainable Food Security, Priya Rampal, Observer Research Foundation, April, 2021
3. The Public Distribution System and Food Security in India, Neetu Abey George and Fiona H. McKay International Journal of Environmental Research and Public Health, 16(17):3221, Sep, 2019
4. Food Security in India: Concept, Realities and Innovations, B.J. Lathi and P. Narkhede, Researchgate publication, December, 2010
5. Food Security in India: Evolution, Efforts and Problems, DPK Pillay and T K Manoj Kumar, Pub online, Strategic Analysis, 42(60), 2018
6. Food Security, Energy Security and Inclusive Growth in India, the Role of Bio-fuels, Herath Gunatilake, ADB, 2011, ISBN 978-92-9092-315-2



7. Mahatma Gandhi National Rural Employment Guarantee Act, 2005, Operational Guidelines, 2013, 4th Edition, Ministry of Rural Development, Department of Rural Development, GOI, New Delhi
 8. Mahatma Gandhi National Rural Employment Guarantee Act, A Critical Appraisal of its Performance since its Perception, Rajiv Ranjan, Indore Management journal, Vol 8(2), July –Dec 2016
 9. Socio Economic Development through the Indian Government Scheme-MGNREGA: A Review on West Bengal State, Mafruza Sultana and K S Srinivasa Rao, International Journal of Advanced Research, 4(9), Sept, 2016
 10. Empowerment on Women Workers: A Case Study in Four Districts, EPW, July, 24, 2010.
 11. Impact of MNREGA Programme on Income, Asset Creation and Food Security: Evidence from Selected 10 Semi-Arid Tropic(SAT) Villages in India, RN Mishra, PK Viswanathan, Madhusudan Bhattarai, Paper Presented in a National Seminar, National Institute of Rural Development, Hyderabad, November, 2014
 12. www.startupindia.gov.in
 13. Framework Agreement on Comprehensive Economic Cooperation between India and ASEAN: 1st Step towards Economic Integration, Seema Gaur, ASEAN Economic bulletin, 20(3), December, 2003
 14. Strengthening ASEAN-India Partnership: Trends and Future Prospects, EXIM Bank, 2018
 15. A Sectoral Impact Analysis of the ASEAN-India Free Trade Agreement, Smitha Francis, EPW, 46(20), Jan 8-12, 2011
 16. ASEAN-India Free Trade Agreement in Goods: An Assessment, Ramphal Ohlan, African Journal of Social Sciences, 2(3), 2012
 17. Estimating the Impact of the India-ASEAN Free Trade Agreement on Indian Industries, Ranajoy Bhattacharya and Avijit Mondal, South Asian Economic Journal, SAGE, 15(1), May, 2014
 18. ASEAN-India Connectivity, An Indian Perspective, Prabir De, in Kimura, F and S Umezki, (eds) ASEAN-India Connectivity: the Comprehensive ASIA Development Plan, Phase 2, ERIA Research Project Report, 2010-7, Jakarta: ERIA
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19. Papola T.S. (2012): Structural Changes in the Indian Economy: Emerging Patterns and Implications, ISID Working Paper 2012/02;
 20. Kannan E and S. Sundaram (2011): Analysis and Trends in India's Agricultural Growth, ISEC Working Paper 276;
 21. Bhat, T.P (2014): India Structural Changes in the Manufacturing Sector and Growth Prospects, ISID Working Paper 173
 22. Mukherjee Arpita (2013): Service Sector in India: Trends, Issues and way Forward, ICRIER Discussion Paper.
 23. GhaniEjaz (ed) (2010): The Service Revolution in South Asia, Oxford University Press;
 24. Roy Satyaki(2012): Regional Disparities inGrowth and Human development in India, ISID Working Paper 2012/05;
 25. World Bank (2011): Perspectives on Poverty in India Stylized facts from Survey Data
 26. Mazumdar D & Sandip Sarkar(2008): The Employment Problem in India and the Problem of Missing Middle;
 27. Rao MG and N Singh (2001): Federalism in India: Political Economy and Reform;
 28. Chakraborty Lekha (2019): Indian Fiscal Federalism at Crossroads: Some Reflections, NIPFP Working Paper 260;
 29. ChakrabortyPinaki and M Gupta (2019); State Finance Commissions, NIPFP Working Paper 263;
 30. MazumdarDipak(2008): Employment and Inequality Outcomes in India
 31. Mukhopadhyay A (2021): Post-pandemic Economic Recovery: Seven Priorities for India, ORF Occasional Paper 295;
 32. Nagaraj R. (2020): Understanding India's Economic Slowdown: Need for Concerted Effort;



33. Kurian N J (2000): Widening Regional Disparities in India, pp 538-551, Economic and Political Weekly February 12;
34. Prasad Pradhan H (1988): Roots of Regional Inequality in India, pp 1689-1692, Economic and Political Weekly, August 13;
35. Bhattacharya B. and Shaktivel S (2004): Regional Growth and Disparity in India Comparison and pre and post-reform decades, pp.1071-1078 Economic and Political Weekly, March 6;
36. Dasgupta Dipankar et. al (2000): Growth and Interstate Disparities in India pp.2413-2423, Economic and Political Weekly, July 1;
37. Marjit S and S Mitra (1996): Convergence in Regional Growth Rates The Indian Agenda pp.2239-2233, Economic and Political Weekly, August 17;
38. Marjit S et.al (1998): Economic Growth and Regional Divergence in India 1960-1995, pp.1623-1631, Economic and Political Weekly, June 27;
39. Ahluwalia, M S (2000): Economic Performance of States in Post-reforms period, pp.1637-1649, Economic and Political Weekly, May 6;
40. Deaton Angus and J Dreze (2002): Poverty and Inequality in India, pp. 3729-49, Economic and Political Weekly, September 7
41. Balakrishnan P et.al (2021): Growth Transitions in India Myths and Reality, pp.43-50; Economic and Political Weekly March 13;
42. Jain Ritika : Privatisation and Indian State, Economic and Political Weekly online;
43. Articles in Economic and Political Weekly January 7, 2017 Special issue on 25 years of Economic Liberalisation of India



Semester II (20 credits, 250 marks)

Core Course (CC6)-Microeconomics-II

Paper VI

Course Credit - 4

Total Lecture Hours: 50

Full Marks: 50

1. Game Theory with Applications

[Lecture Hours 26]

- Revision of ideas on game theory: static games of complete information-normal form representation-prisoner's dilemma-iterated elimination of dominant strategies-Nash equilibrium. Mixed strategies and existence of equilibrium-Applications: (i) Cournot Model of Duopoly, (ii) Bertrand Model of Duopoly, (iii) Final Offer Arbitration, (iv) the problem of commons etc.
- Dynamic games of complete information: dynamic games of complete and perfect information-concept-subgames-backwards induction-subgame perfect Nash equilibrium-Applications: (i) Stackelberg Model of Duopoly, (ii) wages and employment in a unionized firm. Entry deterrence game. Two stage games of complete but imperfect information -Applications : (i) Bank Runs, (ii) Tariffs and Imperfect Competition, (iii) Tournaments etc. Repeated Games-Theory of two-stage repeated games and Theory of Infinitely Repeated Games-Applications: (i) collusion between Cournot duopolists, (ii) efficiency wages, (iii) time consistent monetary policy. Concept of dynamic games of complete but imperfect information
- Issues related to static and dynamic games of incomplete information with economic applications

2. Market Imperfections and the Economics of Information

[12 Lecture Hours]

- Asymmetric information and the market for lemons
- Adverse selection and moral hazard
- The principal-agent problem : Hidden action and Hidden Information

3. General Equilibrium and Welfare : Part II

[12 Lecture Hours]

- Market failure: Sources of market failure and their implications-Failure of Pareto Optimality conditions- Externalities; Public Good.
- Welfare Criteria - Fairness; Pareto optimality; Kaldor efficiency; Scitovsky Criterion; Samuelson Criterion; Cost Benefit Analysis. Social Choice; Social Welfare Function; Arrow's Impossibility Theorem and the related results



References

- Gibbons, R. (2010)- Game Theory for Applied Economists, Pearson Higher Education & Professional Group
- Osborne, M.J. (2003)-An Introduction to Game Theory, the MIT Press
- Laffont, J.J and Martimort D. (2001)- Theory of Incentives: The Principal Agent Model, Princeton University Press.
- Bolton, P and Dewatripont, M. (2005). Contract Theory, The MIT Press.
- MasCollel A., Whinston M. D. and Green J. R. (2012) - Microeconomic Theory, Oxford University Press, India
- Gravelle, H. and Rees, R.(2004) –Microeconomics, 3rd Edition, Prentice Hall
- Jehle G. A. and Reny P. J. (2006) – Advanced Microeconomic Theory, 3rd Edition, Pearson Education, India
- Akerlof, G.A (1970)-“The Market for ‘Lemons’: Quality Uncertainty and the Market Mechanism”, *The Quarterly Journal of Economics*, 84 (3): 488-500



Core Course (CC7)-Macroeconomics-II

Paper VII

Course Credit -4

Total Lecture Hours: 50

Full Marks: 50

Consumption and investment: Permanent income hypothesis, Hall's Random walk hypothesis, role of credit constraint in consumption, precautionary savings, Tobin's q model, financial market imperfections. (14 hours)

Role of government budget constraint: Ricardian equivalence, Tax smoothing. (10 hours)

Real business cycle model: Facts of business cycle fluctuations, technology shock, fiscal shock. (10 hours)

New Keynesian Macroeconomics: Menu cost, aggregate demand externality, non-neutrality of money, staggered wage-price adjustment. (16 hours)

References:

Romer, D. Advanced Macroeconomics, McGrawHill.

Hijdra, B.J. Foundations of Modern Macroeconomics, Oxford University Press.

Carlin W. and D Soskice. Macroeconomics- Imperfections, Institutions and Policies, Oxford University Press.

Mumford P. and D. Peel. Advanced Macroeconomics: A Primer, Edward Elgar.



Core Course (CC8): Econometrics II

Paper VIII

Course Credit – 4 (Theory 2+Practical 2)

Total Lecture Hours: 54

Full Marks 50 (Theory 30+ Practical 20)

Paper VIII (Group A): Theory (30 marks)

1. Data Generating Process (DGP) in Time Series

- Stationary process
- Nonstationary process

[Lecture hour 2]

2. Univariate Time Series Model

- Autoregressive (AR) process
- Moving average (MA) process
- Autoregressive moving average (ARMA) process
- Autoregressive integrated moving average (ARIMA)
- Autocorrelation Function
- Partial Autocorrelation Function
- Non-stationarity without unit root
- Non-stationarity with unit root
- Unit root tests- Augmented Dickey-Fuller test

[Lecture hours 10]

3. Multivariate Time Series Model

- Basic concept of cointegration
- Granger's representation theorem (single equation framework)
- Engle-Granger's two step methodology in testing cointegration

[Lecture hours 4]

4. Panel Data

- Concepts of longitudinal data
- Benefits of panel data
- Sources of variation in panel data

[Lecture hour 2]

5. Static Models

- Unrestricted model
- Restricted model - pooled regression
- Error component model - fixed effects, random effects

[Lecture hours 7]

6. Testing of Hypotheses

- Chow (1960) test for pooled regression
- F test for fixed effects
- Breusch & Pagan (1980) test for random effects
- Fixed or random - Hausman Test

[Lecture hours 4]



5. Special topics (any two)

- Nonparametric regression models
- Regression discontinuity
- Randomized Control Trials
- Difference in difference
- Bootstrapping
- Kernel density method
- Stochastic frontier model
- Data envelopment analysis

[Lecture hours 6]

Paper VIII (Group B): Practical (20 marks)

[Lab class hours 20]

1. Stochastic frontier – DEA: Estimation of efficiency of DMUs
2. Time series analysis: macro models – macro aggregates – trends and growths – Indian macro econometric models.
3. Panel data econometrics: Estimation of models on regional growth

References:

Baltagi, Badi H (2021), *Econometric Analysis of Panel Data*, Springer, 6th Edition.

Bannerjee, et al (1993): Cointegration, Error Correction and the Econometric Analysis of Non-stationary Data, OUP

Banker R.D. (1984). "Some Models for Estimating Technical and Scale Inefficiencies in Data Envelopment Analysis". *Management Science*. 30 (9): 1078–1092.

Coelli, T.J.; Rao, D.S.P.; O'Donnell, C.J.; Battese, G.E. (2005) *An Introduction to Efficiency and Productivity Analysis*, 2nd Edition. Springer

Cook, W.D., Tone, K., and Zhu, J., (2014) Data envelopment analysis: Prior to choosing a model, *OMEGA*, Vol. 44, 1–4.

Cook, Thomas D. (2008). Waiting for Life to Arrive': A history of the regression discontinuity design in Psychology, Statistics and Economics. *Journal of Econometrics*. 142 (2): 636–654.

Das, P. (2019), *Econometrics in Theory and Practice - Analysis of Cross Section, Time Series and Panel Data with Stata 15.1*, Singapore, Springer

Duflo (2003). Grandmothers and Granddaughters: Old-age Pensions and Intrahousehold Allocation in South Africa. *World Bank Economic Review*. 17 (1): 1–25

Enders, W (2004): Applied Econometric Time Series, John-Wiley & Sons (2/e);

Farrell M.J. (1957). "The Measurement of Productive Efficiency". *Journal of the Royal Statistical Society*. 120 (3): 253–281



Henderson, D. J, Parmeter, C. F. (2015). *Applied Nonparametric Econometrics*. New York: Cambridge University Press.

Hastie, T, Tibshirani, R, Friedman, J. H. (2001). *The Elements of Statistical Learning : Data Mining, Inference, and Prediction : with 200 full-color illustrations*. New York: Springer

Joshua D. A and J. S. Pischke (2008), *Mostly Harmless Econometrics: An Empiricist's Companion*

Maddala & In-Moo Kim (1998): Unit Roots, Cointegration and Structural Change, CUP;

Rosenbaum, P. (2017): Observation and Experiment: An Introduction to Causal Inference, Harvard University Press

Varian, H.(2005). Bootstrap Tutorial. *Mathematica Journal*, 9, 768–775



Core Course (CC9): Development Economics

Paper IX

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

Development: Macro Issues

- Introduction: Why development economics? Big questions. Convergence vs non-convergence views – roles of history and institutions.

References:

1. Ray, Debraj (2008), "Development Economics", in The New Palgrave Dictionary of Economics, edited by L. Blume and S. Durlauf,
2. Mookherjee, Dilip and Debraj Ray (2000), Introduction to Readings in the Theory of Economic Development, London: Blackwell.

- Understanding development using Growth Theory – Testing for convergence / non-convergence – Human capital in cross-country regressions

References:

1. Mankiw, N.G., Romer, D. and Weil, D.N., (1992), A contribution to the empirics of economic growth. The quarterly journal of economics, 107(2), pp.407-437.
2. Lucas, R.E., (1990), Why doesn't capital flow from rich to poor countries?. The American Economic Review, 80(2), pp.92-96.
3. Pritchett, L., (1997), Divergence, big time. The Journal of Economic Perspectives, 11(3), pp. 3-17.

- Complementarities and coordination failure – Roles of history and expectations – Demand complementarities and Big Push – Technological complementarities and impacts of globalization

References:

1. Ray, Debraj. Development economics. Ch 5. Palgrave Macmillan UK, 2014.
 2. Murphy, Kevin M., Andrei Shleifer, and Robert W. Vishny. "Industrialization and the big push." Journal of political economy 97 no. 5 (1989): 1003-1026.
 3. Kremer, M., 1993. The O-ring theory of economic development. The Quarterly Journal of Economics, 108(3), pp.551-575.
- Inequality and development – credit market imperfection and human capital formation – occupational choice

References:

1. Ray, Debraj. Development economics. Ch 7. Palgrave Macmillan UK, 2014.
2. Galor, O. and J. Zeira. "Income Distribution and Macroeconomics", Review of Economic Studies (1993) 60, 35-52
3. Ghatak, Maitreesh, and Neville Nien-Huei Jiang. "A simple model of inequality, occupational choice, and development." Journal of development Economics 69.1 (2002): 205-226.



Development: Micro Issues

- From growth centric approach to human development centric approach -- health, human capital and labor market outcomes – impact of health and education policies on health, education and labor market outcomes.
- Networks, human capital and labor market outcomes – Role of networks in human capital investment and labour market outcomes

Suggested Readings:

1. Miguel, Edward, and Michael Kremer. "Worms: identifying impacts on education and health in the presence of treatment externalities." *Econometrica* 72.1 (2004): 159-217.
2. Lavy, Victor, Analia Schlosser, and Adi Shany. *Out of Africa: Human capital consequences of in utero conditions*. No. w21894. National Bureau of Economic Research, 2016.
3. Duflo, Esther. "Schooling and labor market consequences of school construction in Indonesia: Evidence from an unusual policy experiment." *American economic review* 91.4 (2001): 795-813.
4. Munshi, Kaivan, and Mark Rosenzweig. "Traditional institutions meet the modern world: Caste, gender, and schooling choice in a globalizing economy." *American Economic Review* 96.4 (2006): 1225-1252.
5. Luke, Nancy, Kaivan Munshi, and Mark Rosenzweig. "Marriage, networks, and jobs in third world cities." *Journal of the European Economic Association* 2.2-3 (2004): 437-446.
6. Munshi, Kaivan. "Strength in numbers: Networks as a solution to occupational traps." *The Review of Economic Studies* 78.3 (2011): 1069-1101.



**Core Course (CC10): History of Economic Ideas
Paper X**

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Pre-Classical History

0. Mercantilism: Bullionism, mercantilist commercial theories, demographic theories
1. Physiocrats: Petty and Political Arithmetik, Cantillon, Quesnay and Tableau Economy
2. Laissez-Faire : Preconditions of Industrial Revolution

[Lecture hours 3]

2. Adam Smith:

0. Use Value, Exchange Value and Labour Theory of Value
1. Distribution Theory and theory of prices
2. Theory of Invisible Hand
3. Accumulation and Growth
4. Beginning of Institutional Economics
5. Adam Smith Problem

[Lecture hours 7]

3. Utilitarianism:

0. Bentham : From Objective Rationalism to Subjective Rationalism
1. Utility, Production and Income Distribution
2. Say's Theory of Markets

[Lecture hours 3]

4. David Ricardo:

0. Corn Economy
1. Theory of Rents and Distribution
2. Labour Theory of Value
3. Theory of Profits and Ricardian puzzle
4. Ricardo and Malthus on wages
5. Say, Senior, Mill's thoughts
6. Ricardian orthodoxy, anti-Ricardian thoughts and Ricardian socialist thought

[Lecture hours 7]

5. Marginalist School:

0. Utilitarianism Revised: Marshall's Theory of utility and demand
1. Pareto and welfare economics, Pigou, Edgeworth
2. Deductive rationalism



3. Positivism vs Normativism
4. Walras' Theory of General Equilibrium: Tantonnemant Principle
5. Equilibrium and stability : Rise of Neoclassical Orthodoxy

[Lecture hours 3]

6. **Marxian Critique:**

0. Labour Theory of Value and Critique of Political Economy
1. Commodity Production, Fetishism, Circulation, Accumulation of
2. Surplus Value and Exploitation
3. Transformation of Value into Prices

[Lecture hours 7]

7. **Development of Macroeconomics:**

- a. Keynes, Keynesianism, post-Keynesian
- b. Kalecki

[Lecture hours 5]

8. Introduction to Sraffa's Production of Commodities by means of commodities

[Lecture hours 5]

9. Theories of Imperialism: a. Hobson

- b. Luxembourg and Lenin

[Lecture hours 5]

10. Revival of Political Economy, Feminist Critique and Rise of Heterodox School

[Lecture hours 5]

References:

1. Hunt, E and Lautzenheiser, M. (2011): History of Economic Thought, a critical perspective, ME Sharpe, NY & London.
2. Medenna, S.G and Samuels, W.G.(edtd)(2003): The History of Economic Thought: A Reader, Routledge
3. Screpanti E and Zamagni, S (2005): An Outline of the History of Economic Thought, OUP



Semester-III (22 credits, 250 marks)

Generic Elective (GE1): Development Studies

Paper XI

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Evolution of development experience and development thinking; [Lecture hours 4]
2. The rise and fall of developmentalist models; from classical roots to neo-classical and institutional economic thinking. [Lecture hours 6]
3. Goals of development; consequentialist and deontological thinking; alternative approaches to well-being – from wealth/income or opulence to capability/functioning; development as freedom [Lecture hours 8]
4. Measuring Unequal Opportunity– Parametric Approaches, Non-parametric Approaches, Human Opportunity Index [Lecture hours 10]
5. Market failure; economic role of the state; government failure. [Lecture hours 4]
6. State, Market and Economic Development: Country experiences [Lecture hours 4]
7. Inequality and Economic Development – post-war evolution of global inequality [Lecture hours 10]
8. Market and alternative institutions; market and efficiency; market and freedom; [Lecture hours 4]

References:

Ha-Joon Chang , 2003, Kicking Away the Ladder,, London:Anthem Press [Chapter 1].
Munshi, Kaivan, 2006. “Nonmarket Institutions”, In: Abhijit V Banerjee, Roland Benabou and Dilip Mookherjee (eds) Understanding Poverty, Oxford: Oxford UniversityPress[Chapter : 23]
Picketty, Thomas, 2014. Capital in the Twenty First Century, Harvard University Press
John Rawls, 1971. A Theory of Justice, Harvard: Harvard University Press. [Chapters 1&2].
John Roemer, 2000. ‘Equality o f Opportunity’, In: Kenneth Arrow, Samuel Bowles and Steven Durlauf (eds) Meritocracy and Economic Inequality, Oxford: Oxford UniversityPress.
Amartya, Sen 2000. Development as Freedom, Oxford: Oxford UniversityPress, [Chapters 1-3 and 5].
Amartya ,Sen and Bernard Williams 1982 Utilitarianism and Beyond, CUP.[Introduction]
Thorbecke, Erik , 2007, “The Evolution of the Development Doctrine, 1900-2005”, In: G. Mavrotos and A. Shorrocks (editors) Advancing Development, Palgrave MacMillan.



Core course (CC 11): Group Project-I
Paper XII

Course Credit – 6
Total Lecture Hours: 50

Full Marks 50



Discipline Specific Elective Course (DSE 1): Advanced Macroeconomics I

Paper XIII (1)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Topics from Real Business Cycle Theory. (8 lectures)
2. Topics from New Keynesian Macroeconomic Theory. (12 lectures)
3. Topics from Overlapping Generations Models. (5 lectures)
4. Topics from Open Economy Macroeconomy: (20 lectures)
 - Determination of equilibrium Income in Open economy Simple Keynesian Model. Foreign Trade Multiplier with and without Repercussions and related issues.
 - Balance of Payments Equilibrium. The Impact of Devaluation on Trade Balance and Income.
 - Home Goods and Traded Goods : The Dependent Economy Model– real exchange rate determination in a dependent economy : Calvo and Rodriguez (1977)
 - The Monetary Approach to Balance of Payments. Stabilization Policies under fixed Exchange Rates. Stabilization Policies under Flexible Exchange Rates: The Mundell-Fleming Model.
 - The Asset Approach to the Exchange Rate-Uncovered and Covered Interest Parity
 - Purchasing Power Parity and the Exchange Rate- The Balassa-Samuelson effect
 - Exchange Rate Dynamics and Overshooting
 - The Monetary Approach to Exchange Rate and beyond Monetary Theories: The Macro Analysis of Real Exchange Rate. The Fisher Effect
 - Exchange Rate Policy : The J-Curve, Impossible Trinity and Exchange Rate Policy in a Liquidity Trap
 - New Open Economy Macroeconomics and the New Directions of Monetary and Fiscal Policies.
5. Macroeconomics of Developing Countries with special reference to India (5 lectures)
 - The Effective Demand Problem in the context of Indian Economy and the Rakshit-Taylor Framework
 - Integration of real and monetary sectors in a demand-constraint economy: Evidences from India.

References

- (i) Romer, D., *Advanced Macroeconomics* (4th Edition), McGraw-Hill, New York, 2012.
- (ii) Ljungqvist L. and T. Sargent, T., *Recursive Macroeconomic Theory* (4th Edition), MIT Press, 2018.
- (iii) Dornbusch, R. *Open Economy Macroeconomics*, Basic Books, Inc. Publishers, New York, 1980.
- (iv) Krugman P. , M. Obstfeld and M. Melitz, *International Economics: Theory and Policy*, 10th edition, Pearson, 2015.
- (v) Obstfeld, M. and K. Rogoff, *Foundations of International Macroeconomics*, The MIT Press, 1996.
- (vi) Rivera-Batiz, F.L. and L.A. Rivera-Batiz L.A., *International Finance and Open Economy Macroeconomics*, 2nd edition, Prentice Hall, 1994.
- (vii) Caves, R., J. Frankel and R.W. Jones – *World Trades & Payments: An Introduction* (10th Ed); Pearson Education, 2007.
- (viii) Goyal, A. *Macroeconomics and Markets in Developing and Emerging Economies*, Routledge, Taylor and Francis Group, 2017.
- (ix) Calvo, G.A. and Rodriguez, C. A. : ‘A Model of Exchange Rate Determination and Currency Substitution under Rational Expectation’, *Journal of Political Economy*, 1977, 85(3), 617-625.
- (x) Rakshit, M. : *The Labour Surplus Economy : A Neo-Keynesian Approach*, Humanities Press, 1983.
- (xi) Rakshit, M. : *Macroeconomics of Post-Reform India*, OUP, 2010
- (xii) Rakshit, M. (ed): *Studies in the Macroeconomics of Developing Countries*, OUP, 1989.



Discipline Specific Elective Course (DSE 3): Game Theory and Information I

Paper XIII (2)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

- Static and dynamic non-cooperative games under complete information – revision
- Repeated games – Folk theorems - Applications
- Games under incomplete information
 - Static games – Bayesian Nash Equilibrium – Applications
 - Dynamic games – Perfect Bayesian Equilibrium – Signaling games - Applications
- Introduction to cooperative games - Shapley value and Core - Applications.
- Basic Mechanism Design Problem

References:

1. Microeconomic Theory – MasCollé, Whinston and Green
2. A Course in Game Theory – Osborne and Rubinstein
3. Game Theory – Fudenberg and Tirole



Discipline Specific Elective Course (DSE 5): International Economics I

Paper XIII (3)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Traditional Trade Theory with Applications

[24 lecture hours]

- Classical Theory of International Trade: The Ricardian Theory of Comparative Advantage with extensions
- Applications of Ricardian Theory : The Theory of Ricardian Continuum; Trade and Time Zone; The Theory of Vertical Specialization
- Neo-classical Theory of International Trade: Heckscher-Ohlin Trade Model, Incomplete Specialization, Factor Intensity Reversal and the Factor Price Equalization Theorem: The Cone of Diversification.
- Gains from Trade under different assumptions : A revisit to old ideas
- Applications of neo-classical general equilibrium trade models for developing countries: Jones (1965) model : Rybczynski and Stolper-Samuelson Effects; Jones (1971) sector-specific model : the price magnification effect, role of non-traded goods and the Dutch Disease; Models with urban unemployment : Harris-Todaro(1970) and Corden-Findlay (1975) models; Foreign Capital and Social Welfare : the Brecher-Alejandro (1977) proposition in terms of Jones (1965) and Corden-Findlay (1975) models. Hybrid trade models and their implications for developing countries.
- Models on informal sector; skilled-unskilled wage inequality and skill formation.
- Finite changes in general equilibrium trade models. Global Value Chain and International Fragmentation.

References

Books

- (i) R. Caves, J. Frankel and R. Jones, *World Trade and Payments*, 10th edition, Pearson, 2007.
- (ii) R. Jones, *International Trade: Essays in Theory*, North Holland, 1979
- (iii) R. C. Feenstra: *Advanced International Trade: Theory and Evidence*. Princeton University Press, 2004.
- (iv) R. Acharyya: *International Economics*, OUP, 2014.
- (v) R.N.Batra, *Studies in the Pure Theory of International Trade*, Macmillann, 1972.
- (vi) G. Gandolfo: *International Trade Theory and Policy*, Springer, 2006.
- (vii) S. Marjit: *International Trade and Economic Development- Theory and Policy*, OUP, 2008
- (viii) S. Chaudhuri and U. Mukhopadhyay, *Foreign Direct Investment in Developing Countries: A Theoretical Evaluation*, Springer, 2014.

(ix)

Articles

- (i) Acharyya, R. and Marjit, S. (2000): 'Globalisation and Inequality: An Analytical Perspective', *Economic and Political Weekly*, 35: 23-29.
- (ii) Beladi, H., & Marjit, S. (1992). Foreign capital and protectionism. *Canadian Journal of Economics*, 233-238.
- (iii) Brecher, R.A. and Alejandro, C.F. Diaz (1977): 'Tariffs, Foreign Capital and Immiserizing Growth', *Journal of International Economics*, 7: 317-322.
- (iv) Chandra, V. and Khan, M.A. (1993): 'Foreign Investment in the Presence of an Informal Sector', *Economica*, 60(237): 79-103.
- (v) Chaudhuri, S. and Yabuuchi, S. (2007): 'Economic Liberalization and Wage Inequality in the Presence of Labour Market Imperfection', *International Review of Economics and Finance*, 16 (4):592-603.
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- (xvi) Marjit, S. (2003): ‘Economic Reform and Informal Wage – A General Equilibrium Analysis’, *Journal of Development Economics*, 72: 371-378.
- (xvii) Marjit, S. (2007) : ‘ Trade Theory and the Role of Time Zones’, *International Review of Economics and Finance*, 16(2) : 153-160.
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- (xxii) Mitra, S., and Gupta, K. (2020) : ‘ Fragmentation, Skill Formation and International Capital Mobility’, *Singapore Economic Review*, 65(2) : 335-350.
- (xxiii) Sanyal, K. (1983) : ‘ Vertical Specialization in a Ricardian Model with Continuum Stages of Production’, *Economica*, 50(197) : 71-78.

2. New Trade Theory

[10 lecture hours]

- Intra-industry trade, increasing returns to scale and product differentiation in a monopolistically competitive framework. Trade and Economic Geography. Models of Krugman (1979) and Krugman (1980), Krugman (1991).
- Monopolistic competition, trade and intermediate goods.

References

Books

- (i) G. Gandolfo: *International Trade Theory and Policy*, Springer, 2006.
- (ii) P.R. Krugman, *Rethinking International Trade*, 1994, MIT press.

Articles

- (i) Krugman, P.R. (1979) : ‘Increasing Returns, Monopolistic Competition and International Trade,’ *Journal of International Economics*, 9 : 469-479.
- (ii) Krugman, P.R. (1980) : ‘Scale Economies, Product Differentiation, and the Pattern of Trade’, *American Economic Review*, 70(5): 950-959.



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- (iv) Chakraborty, B.S. (2003) : 'Trade in Intermediate Goods in a Model with Monopolistic Competition', *Economica*, 70:551-566.

(iii) Open Economy Macroeconomics

[16 lecture hours]

- Open Economy Macroeconomics: Determination of equilibrium Income in Open economy Simple Keynesian Model. Foreign Trade Multiplier with and without Repercussions and related issues.
- Balance of Payments Equilibrium. The impact of Devaluation on Trade Balance and Income.
- Home Goods and Traded Goods : The Dependent Economy Model– real exchange rate determination in a dependent economy : Calvo and Rodriguez (1977)
- The Monetary approach to Balance of Payments.
- Stabilization Policies under fixed Exchange Rates. Stabilization Policies under Flexible Exchange Rates: The Mundell-Fleming Model.
- Asset Approach to Exchange Rate-covered and uncovered interest parity-spot and forward exchange rates.
- Purchasing Power Parity and Exchange Rate.
- The Monetary Approach to Exchange Rate-the Fisher Effect
- Exchange Rate Policy- J-Curve, Impossible Trinity and Exchange Rate Policy in a Liquidity Trap.
- Exchange Rate Dynamics and Overshooting.

References

- (xiii) R. Dornbusch, *Open Economy Macroeconomics*, Basic Books, Inc. Publishers, New York, 1980.
- (xiv) P. Krugman, M. Obstfeld and M. Melitz, *International Economics: Theory and Policy*, 10th edition, Pearson, 2015.
- (xv) M. Obstfeld, and K. Rogoff, *Foundations of International Macroeconomics*, The MIT Press, 1996.
- (xvi) F.L. Rivera-Batiz, and L.A. Rivera-Batiz L.A. , *International Finance and Open Economy Macroeconomics*, 2nd edition, Prentice Hall, 1994.
- (xvii) R. Caves, J. Frankel and R.W. Jones – *World Trades & Payments: An Introduction* (10th Ed); Pearson Education, 2007.
- (xviii) A Goyal, . *Macroeconomics and Markets in Developing and Emerging Economies*, Routledge, Taylor and Francis Group, 2017.
- (xix) Calvo, G.A. and Rodriguez, C. A.(1977) : 'A Model of Exchange Rate Determination and Currency Substitution under Rational Expectation', *Journal of Political Economy*, 85(3): 617-625.



Discipline Specific Elective Course (DSE 7): Urban Economics I

Paper XIII (4)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Introduction to Urban Economics: The Space-Economy Interaction;
2. The Emergence and Development of Urban Areas – An Economic Perspective;
3. Urbanization in a Global Perspective – The Developed-developing Country Interaction;
4. Urbanization in India with special reference to West Bengal – Trends and Patterns, Structure of Urban Economy, Rural-urban relationship;

5. Basics of Urban Economics

- (i) Urban system – hierarchy and city size distribution; Central Place Theory
- (ii) Location Theory, Intra and Inter-urban Location of Economic Activities, The distance-decay relationship – concept of gradients.
- (iii) Urban Base Theory – Theory of Optimal City Size
- (iv) Urban in The Region – Introduction to Regional Economics

References:

- Balchin et. al (2000): Urban Economics: A Global Perspective, Palgrave;
- O' Sullivan, (2007): Urban Economics (7th edition), IRWIN, London;
- Evans, A.W, Urban Economics: An Introduction, Basil Blackwell
- Kundu, Singh and Sivaramakrishnan (2002): A Handbook of Urbanisation in India (2nd Edition)
- Giri, Pabitra (1997): "Urbanisation in West Bengal", Economic and Political Weekly 47 (40)
- Chatterjee, Mahalaya (2013): "Urbanisation in West Bengal; Trends and Future Perspective", Local Government Quarterly (June-September);
- Webber, M.L (1985), Industrial Location, sage Publications, London
- Brooks. et. al (edited) (2012), The Oxford Handbook of Urban Economics and Planning, OUP London
- Hoover. Edger. M and Giarratani.Frank, (1999) , An Introduction to Regional Economics, The Web Book of Regional Science



Discipline Specific Elective Course (DSE 9): Economics of Industry I

Paper XIII (5)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

Markets and Strategies - A revision (2 lectures)

Market definition, market power, concentration

Static Imperfect Competition (6 lectures)

Price and Quantity Competition – Price vs. Quantity Competition- Differentiated Products: Cournot vs. Bertrand – Strategic substitutes and complements.

Dynamic Aspects of Imperfect Competition (6 lectures)

Free entry – Monopolistic Competition – Industry Concentration – Sunk Costs.

Pricing Strategies and Market Segmentation (10 lectures)

Group pricing and personalized pricing – menu pricing – monopoly menu pricing – quality and quantity based menu pricing - bundling

Product Differentiation (10 lectures)

Horizontal differentiation: Location models – Vertical differentiation: Quality choice – Empirical analysis of product differentiation.

Product quality and information (10 lectures)

Asymmetric information problems – hidden information – hidden action – advertising and price signals – price signalling under imperfect competition

Competition Policy (6 lectures)

Historical perspective – Competition laws: Study of USA, EU and India – Cartels and tacit collusion – Horizontal mergers: profitability, efficiency, welfare effects – Mergers and entry – Vertical mergers

References

- P. Bellafiame and M. Peitz: Industrial Organization and Market Structure
- Tirole: The Theory of Industrial Organization
- Oz. Shy: Industrial Organization
- Economic Survey of India
- ASI Manual
- GoKarn, Sen and Vaidya: The structure of Indian Economy
- Kathuria, Raj and Sen, *Organized vs Unorganized Manufacturing Performance in Manufacturing Industries*, EPW, 2010
-
- Ghosh and Neogi, Productivity, *Efficiency and New technology: the case of Indian manufacturing industries*, The Developing Economies, 1993
- Bhandari and Maiti, *Efficiency of Indian Manufacturing Firms: Textile Industry as a Case Study*, International Journal of Business and Economics, 2007
- Kumbhakar and Knox Lovell, Stochastic Frontier Analysis, Cambridge University Press.



Discipline Specific Elective Course (DSE 11): Public Economics I

Paper XIII (6)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

- Introduction: Equity, efficiency and role of the state

- Public goods

- o Properties of public goods

- o Efficient vs. Private provision

- o Voluntary contributions for public goods

- o Lindahl taxes

- o Demand revealing mechanism

- o Merit goods and club goods

- Taxation

- o Incidence: Partial and General Equilibrium

- o Optimal taxation: Commodity and Income taxation

- o Taxation and savings

- Fiscal federalism

- o The Economic Theory of Federalism

- o Intergovernmental Transfers

- o Local vs. state taxes

- Corruption and related issues

- Empirical Issues in Public Economics

References:

1. Microeconomics of Market Failure – Bernard Salanie
2. Economics of Taxation - Bernard Salanie
3. Political Competition: Theory and Applications – John E. Roemer
4. Public Choice III – Dennis Mueller



Discipline Specific Elective Course (DSE 13): Behavioural Economics I

Paper XIII (7)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

Introduction to Behavioral Economics

(4 lectures)

Deviations from standards neoclassical models in terms of preferences, beliefs and learning and decision making.

Choice under Risk and Uncertainty

(6 lectures)

Expected Utility Theory, Violations of Expected Utility Theory

Behavioral Models of Decision Making

(15 lectures)

Probability weighting functions, Rank Dependent Utility Theory, Prospect Theory, Applications

Social Preferences

(15 lectures)

Ultimatum and dictator games, Gift exchange and trust games, Public goods games.

Altruism, inequity aversion, reciprocity, fairness, incentives and other regarding preferences

Time Preferences

(10 lectures)

Temporal Human Choice and time discounting, present biased preferences, procrastination and preproperation

References

The Foundations of Behavioral Economic Analysis, Dhimi, N. Oxford University Press

Mind, Society and Behavior. World Development Report, 2015

An Introduction to Behavioral Economics, N. Wilkinson and M. Klaes (2012), Palgrave Macmillan.

“Psychology and Economics.”, Rabin, Matthew. 1998, Journal of Economic Literature 36(1): 11-46.



Discipline Specific Elective Course (DSE 15): Social Economics I

Paper XIII (8)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Introduction to social economics [4 lecture hours]

- Origin and early history of social economics- values, and premises of social economics-evolution and contribution of social economics to economic analysis-social economists' perspective of economic policy. Challenges of social economics

2. Economics and ethics: An introduction [4 lecture hours]

- The link between economics and ethics- the influence of economics on ethics and the influence of ethics on economics
- Understanding ethics from a complex systems perspective

3. Status and identity: The economics of an individual [12 lecture hours]

- The conception of atomistic versus socially embedded individuals; the social and personal identity of an individual, the social identity theory; Tajfel & Turner's in-group versus outgroup analysis of social identity; social identity strategies in economics: social identity as a preference; the Akerlof-Kranton (AK) initiative, Davis' critique of the AK Approach; social identity and economic policies
- An individual's preferences for status: evidence and economic implications; status and behaviors

4. Economics of stratification and discrimination [12 lecture hours]

- Characteristics of stratification economics (SE), differences and commonalities of SE with mainstream economics- SE on club goods and common pool resource goods- A general theory of SE: stigmatization, exclusion, and capability shortfalls; stratification and intergroup inequality
- Discrimination: definition, types, and measures; discrimination: Myrdal versus Becker; Arrow & Phelps' conception of statistical discrimination; intra-& extra-household discrimination: a gendered perspective; demand-side discrimination- the case of pre-and

post-entry discrimination in the labor market; supply-side discrimination- the case of the rental housing market.

5. Social concerns in economics [10 lecture hours]

- Institution, values, and culture
- Insecurity and hatred: an economic perspective
- Crime and punishment



- Economic inequality, political violence, and religiosity
- Case studies: hate crime, crime against the elderly, distributive inequality in welfare benefits etc.

6. Other issues of social economics [8 lecture hours]

References

Books

- Anderson, R. W. (1976). *Economics of Crime*. Macmillan International Higher Education.
- Barrett, C. B. (2006). *The social economics of poverty*. Routledge.
- Becker, G. S. & Landes, W. M. (Eds.). Essays in the economics of crime and punishment. NBER, New York: Columbia U. Press, 1974.
- Becker, G. S., & Murphy, K. M. (2009). Social economics. In *Social Economics*. Harvard University Press.
- Benhabib, J., Bisin, A., & Jackson, M. O. (Eds.). (2010). *Handbook of social economics*. Elsevier.
- Betti, G., & Lemmi, A. (Eds.). (2013). *Poverty and social exclusion: New methods of analysis*. Routledge.
- Clary, B. J., Dolfsma, W., & Figart, D. M. (2006). *Ethics and the market: Insights from social economics*. Routledge.
- Davis, J. B. (Ed.). (2001). *The social economics of health care*. London: Routledge.
- Davis, J. B. (2003). *The theory of the individual in economics: identity and value*. Routledge.
- Davis, J. B. (2010). *Individuals and identity in economics*. Cambridge University Press.
- Davis, J. B. (2011). Identity Economics: How Our Identities Shape Our Work, Wages, and Well-Being, George A. Akerlof and Rachel E. Kranton, Princeton University Press, vi+ 185 pp. *Economics & Philosophy*, 27(3), 331-338.
- Davis, J. B. [2018]: Ethics and Economics: A Complex Systems Approach. In: White, M. D. (Ed.): Handbook of Ethics and Economics. Oxford University Press.
- Davis, J. B. (2021). Social economics. *Elgar Handbook of Alternative Theories of Political Economy*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3847356
- Davis, J. B., & Dolfsma, W. (Eds.). (2010). *The Elgar companion to social economics*. Edward Elgar Publishing.
- Davis, J. B., & McMaster, R. (2017). *Health care economics*. Routledge.
- Fang, H., & Moro, A. (2011). Theories of statistical discrimination and affirmative action: A survey. *Handbook of social economics*, 1, 133-200.
- Graafland, J. (2021). *Ethics and Economics: An Introduction to Free Markets, Equality and Happiness*. Routledge.
- Peil, J., & van Staveren, I. (Eds.). (2009). *Handbook of economics and ethics*. Edward Elgar Publishing.
- Phelps, E. S. (1972). The statistical theory of racism and sexism. *The American Economic Review*, 62(4), 659-661.
- Pressman, S. (Ed.). (2020). *How Social Forces Impact the Economy*. Routledge.
- O'Boyle, E. (Ed.). (2005). *Social economics: Premises, findings, and policies*. Routledge.



Rodgers, W. M. (2009). *Handbook on the Economics of Discrimination*. Edward Elgar Publishing.

Rycroft, R. S. (2017). *The economics of inequality, discrimination, poverty, and mobility*. Routledge.

Wight, J.B. (2015). *Ethics in economics: An introduction to moral framework*, Stanford University Press.

Articles

Ahmed, A. M., & Hammarstedt, M. (2008). Discrimination in the rental housing market: A field experiment on the Internet. *Journal of Urban Economics*, 64(2), 362-372.

Akerlof, G. and Kranton, R. (2000). Economics and identity, *Quarterly Journal of Economics*, 115(3), 715–53.

Arrow, K. J. (1973), The Theory of Discrimination, in O. Ashenfelter and A. Rees (eds.), *Discrimination in Labor Markets*, Princeton, NJ: Princeton University Press.

Arrow, K. J. (1998). What has economics to say about racial discrimination?. *Journal of economic perspectives*, 12(2), 91-100.

Banerjee, A., Bertrand, M., Datta, S., & Mullainathan, S. (2009). Labor market discrimination in Delhi: Evidence from a field experiment. *Journal of Comparative Economics*, 37(1), 14-27.

Barrett, C. B. (2006). On the relevance of identities, communities, groups, and networks to the economics of poverty alleviation. In: Barrett, Christopher B (Ed). *The social economics of poverty*. Routledge, 2006, 1-11.

Bayer, P., Casey, M., Ferreira, F., & McMillan, R. (2017). Racial and ethnic price differentials in the housing market. *Journal of Urban Economics*, 102, 91-105.

Bertrand, M., & Mullainathan, S. (2004). Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination. *American Economic Review*, 94(4), 991-1013.

Booth, D. E. (1995). Economic growth and the limits of environmental regulation: a social economic analysis. *Review of Social Economy*, 53(4), 553-573.

Burnazoglu, M. (2017, November). An identity-based matching theory approach to integration. In *Forum for Social Economics*. Routledge.

Christoforou, A. (2013). On the identity of social capital and the social capital of identity. *Cambridge Journal of Economics*, 37(4), 719-736.

Davis, J. B. (1995). Personal identity and standard economic theory. *Journal of Economic Methodology*, 2(1), 35-52.

Davis, J. B. (2006). Social identity strategies in recent economics. *Journal of Economic Methodology*, 13(3), 371-390.

Davis, J. B. (2007). Akerlof and Kranton on identity in economics: inverting the analysis. *Cambridge Journal of Economics*, 31(3), 349-362.

Davis, J. B. (2019). Stratification economics as an economics of exclusion. *Journal of Economics, Race, and Policy*, 2(3), 163-172.

Dickinson, D. L., & Oaxaca, R. L. (2009). Statistical discrimination in labor markets: An experimental analysis. *Southern Economic Journal*, 76(1), 16-31.



Joan, M. A. (1995). Distributional issues in ecological economics. *Review of Social Economy*, 53(4), 511-528.

John B. Davis & Robert McMaster (2020) A road not taken? A brief history of care in economic thought, *The European Journal of the History of Economic Thought*, 27:2, 209-229.

Davis, J. B. (2022). A general theory of social economic stratification: stigmatization, exclusion, and capability shortfalls. *Review of Evolutionary Political Economy*, 1-21.

Glaeser, E. L. (2005). The political economy of hatred. *The Quarterly Journal of Economics*, 120(1), 45-86.

Gusciute, E., Mühlau, P., & Layte, R. (2022). Discrimination in the rental housing market: a field experiment in Ireland. *Journal of Ethnic and Migration Studies*, 48(3), 613-634.

Hofmeyr, A., & Burns, J. (2012). Two sides of the same coin: Re-examining nepotism and discrimination in a segmented society. *Review of Social Economy*, 70(3), 344-374.

Jayachandran, S. (2021). Social norms as a barrier to women's employment in developing countries. *IMF Economic Review*, 69(3), 576-595.

Legros, S., & Cislighi, B. (2020). Mapping the social-norms literature: An overview of reviews. *Perspectives on Psychological Science*, 15(1), 62-80.

O'Boyle, E. J. (2005). Homo socio-economicus: foundational to social economics and the social economy. *Review of Social Economy*, 63(3), 483-507.

O'Hara, S. (1995). Sustainability: Social and ecological dimensions. *Review of Social Economy*, 53(4), 529-551.

Pressman, S. (2001). The challenge of social economics: a review essay. *Review of Social Economy*, 59(1), 109-114.

Sacchetti, S., Borzaga, C., & Tortia, E. C. (2021, May). The institutions of livelihood and social enterprise systems. In: *Forum for Social Economics* (pp. 1-16). Routledge. <https://doi.org/10.1080/07360932.2021.1927792>

Sharma, S. (2015). Caste-based crimes and economic status: Evidence from India. *Journal of comparative economics*, 43(1), 204-226.

Shulman, S. (1992). Metaphors of discrimination: a comparison of Gunnar Myrdal and Gary Becker. *Review of Social Economy*, 50(4), 432-452.

Spash, C. L. (2011). Social ecological economics: Understanding the past to see the future. *American Journal of Economics and Sociology*, 70(2), 340-375.

Swaney, J. A. (1995). Social economics and risk analysis. *Review of Social Economy*, 53(4), 575-594.

Zafirovski, M. (2017). Social Economics. In: Brian, T. *The Wiley-Blackwell Encyclopedia of Social Theory* 1-10.



Discipline Specific Elective Course (DSE 17): Advanced Econometrics I

Paper XIV (1)

Course Credit – 4 (Theory (2) + Practical (2))

Total Lecture Hours: 54

Full Marks 50

Group A: Theory (30 marks)

1. Non-stationarity, Unit-root and Structural break

- Phillips-Perron unit root test
- Dickey Fuller GLS test
- Stationarity tests
- Multiple unit roots
- Problems with unit root tests
- Testing for structural break
- Unit root test with break

[Lecture hours 6]

2. Seasonal time series

- Stochastic seasonal process
- Seasonal unit root – HEGY test

[Lecture hours 4]

3. Cointegration, Error Correction and Vector Autoregression

- Vector autoregression
- Impulse response function and variance decomposition
- Vector error correction mechanism and cointegration – system framework

[Lecture hours 6]

4. Time Series Forecasting

- Univariate model of forecasting
- Forecasting of ARMA model
- Forecasting of GARCH model

[Lecture hours 4]

5. Bayesian modelling of time series

- State-space model
- Markov switching and mixture models
- Models for time-varying volatility

[Lecture hours 4]

6. Conditional heteroscedastic models

- Characteristics of volatility
- The ARCH and GARCH model
- Random coefficient autoregressive models
- Multivariate GARCH Models

[Lecture hours 6]



7. Time Series in finance

- Asset returns
- Distributional properties of returns
- The return series of multiple assets
- Bayesian inference in finance methods
- GARCH models for bivariate returns

[Lecture hours 6]

Group B: Practical (20 marks)

[Lab class hours 20]

Application of advanced econometric methods in empirical study on specific problems based on macroeconomics, finance and growth theories with time series

References:

Das, P. (2019), *Econometrics in Theory and Practice - Analysis of Cross Section, Time Series and Panel Data with Stata 15.1*, Singapore, Springer

Enders, W (2004): *Applied Econometric Time Series*, John-Wiley & Sons (2/e)

Koop, G. 2003. *Bayesian Econometrics*. Chichester: Wiley.

Maddala & In-Moo Kim (1998): *Unit Roots, Cointegration and Structural Change*, CUP;

Ruey S. Tsay (2010) *Analysis of Financial Time Series*, 3rd Edition, John-Wiley & Sons



Discipline Specific Elective Course (DSE 19): Operations Research I

Paper XIV (2)

Course Credit – 4 (Theory 2 + Practical 2)

Total Lecture Hours: 50

Full Marks 50

Group A: 25 marks

1. Deterministic models of Optimisation: Linear Programming, Transportation and Assignment models, Duality and Sensitivity Models, Parametric Linear Programming, Integer Programming, Zero-one programming, Multi objective Optimisation. [5 lectures]
2. Nonlinear Programming: Reduced Gradient Algorithm, Quadratic Programming, Separable Programming Methods [3 lectures]
3. Shortest Path and Discrete Dynamic Programming: Dynamic Programming Approach to Shortest Paths, CPM, Discrete Dynamic Programming models. [5 lectures]
4. Network Analysis: Optimal network flows [5 lectures]
5. Applications of Game Theory [2 lectures]
6. Deterministic Inventory Analysis [5 lectures]

Group B: 25 marks

Practical Applications of the Topics 1-6 in Group A based on Excel and R [25 lectures]

References:

1. Taha, H(2000): Operations Research , Pearson Publication, India
2. Rardin, R (1998): Optimization in Operations Research, Pearson Publication, India
3. G. Srinivasan(2010): Operations Research: Principles and Applications, Eastern Economy Edition
4. Salimath & Parashar (2014): Operations Research: Models and Methods,



Discipline Specific Elective Course (DSE 21): Money and Finance I

Paper XIV (3)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

Group A – Monetary Economics (25 marks)

- **Usefulness of money:** Search theoretic models of money, Overlapping generations model of money
- **Different approaches to modeling money:** Money in the utility function – Cash-in-advance
- **Money and public finance:** Budget accounting – Equilibrium seigniorage – Friedman’s rule – optimal taxation and seigniorage
- **Optimal policy framework:** Policy analysis under commitment – interest rate management

Group B – Financial Economics (25 marks)

- **Introduction to corporate finance:** Guiding principles, managerial deviations and corporate governance
- **Time value of money:** Methods of present value and future value measurement
- **Methods of capital budgeting:** NPV rule, payback period, internal rate of return and return on investment
- **Analysis of risk:** A brief introduction - risk of a single asset, portfolio risk, selection of optimum portfolio, capital asset pricing model
- **Debt and equity instruments:** Valuation of bonds, bond yield, yield curve, cost of debt, credit rationing valuation of shares, efficient market hypothesis- concept and shortcomings, impact of information asymmetry on valuation of shares, cost of equity, measurement of cost of capital
- **Financing choice of firms:** Internal and external financing, financing choice of firms over the life cycle, choice of capital structure-Modigliani and Miller theorem, trade off theory, models based on agency cost, theories based on asymmetric information, models based on product market imperfections, theories driven by corporate control considerations



Discipline Specific Elective Course (DSE 23): Economics of Institutions I

Paper XIV (4)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Some basic concepts about institutions – different types of institutions and their roles in shaping incentives – property rights institutions and contract enforcement institutions – formal vs informal institutions – state and community network.
2. Why do institutions differ – different theories -- the efficient institutions view, political Coase theorem, the ideology view, the incidental institution view, the social conflict view.
3. Effect of institutions – empirical evidence -- effect of legal origin – reversal of fortune.
4. Theory of informal institutions -- role of community in contract enforcement and property right management.

References:

Dixit, A (2007): *Lawlessness and Economics: Alternative Mode of Governance*. Princeton University Press

Greif, A (2006): *Institutions and the Path to the Modern Economy: Lessons from Medieval Trade*. Cambridge University Press.

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Ostrom, E (1990): *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press

**Besides the references listed above several journal articles will also be used.



Discipline Specific Elective Course (DSE 25): Political Economy of Development I

Paper XIV (5)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

Epistemology of Development: Enlightenment, colonialism and orientalism; Classical Political Economy, industrialization and capitalism; economic dualism: capitalo-centrism, orientalism and eurocentrism; birth of third world; capitalist development, structural transition and poverty eradication; A brief history of Capitalist led transition and development. (10 hours)

Debates on capitalist development: underdevelopment theories of centre-periphery, unequal exchange, regulation theory and world system theory; economic dualism, capitalist development and socialist transition. (8 hours)

Alternative theories of development: Post-developmental critique and pluriverse; Capability, human development and justice (12 hours)

Class and Development: class-focused theory and class justice; class and need: surplus, need and development distribution; development justice, public policy of inclusion and management of third world. (12 hours)

Ecological critique of capitalist led development; anthropocene, capitalocene and ecosocialism; capitalist led development after climate change, pandemic and war; degrowth. (8)

References

Amin, S. 1989. *Eurocentrism*. New York: Monthly Review Press.

Chakrabarti, A and Dhar, A. 2009. *Dislocation and Resettlement in Development: From Third World to World of the Third*. Routledge.

Escobar, A. 1995. *Encountering development: the making and unmaking of the third world*. Princeton University Press.

Ha-Joon Chang. 2002. *Kicking Away the Ladder: Development Strategy in Historical Perspective*, Anthem.

Klein, E and C.E. Morrero. 2019. *Postdevelopment in Practice: Alternatives, Economies, Ontologies*. (ed.). Routledge.

Kothari, Ashish, Ariel Salleh, Arturo Escobar, Federico Demaria, and Alberto Acosta, 2019. *Pluriverse: A Post-Development Dictionary*, New Delhi, India, Tulika Books.

Larrrain, J. 1989. *Theories of Development: Capitalism, Colonialism and Dependency*. Polity Press.

Lal, Deepak (2000), *The Poverty of "Development Economics"*. 2d revised and expanded U.S. edition. Cambridge: MIT Press.

Resnick, S. and R. Wolff. 2012. *Contending Economic Theories*. MIT Press. •

Ruccio, D. 2011. *Development and Globalization: A Marxian Class Analysis*. Routledge.

Rahnema, M. and V Bawtree. 1997. *The Post-Development Reader*. Zed Books Ltd.

Saito, K. 2018. *Karl Marx's Ecosocialism: Capital, Nature, and the Unfinished Critique of Political Economy*. Monthly Review Press.

Sen, A.K. 2000. *Development as Freedom*, Oxford: Oxford University Press.

Sen, A. K. 2003. *Rationality and Freedom*, Oxford University Press: New Delhi.

Warren, B. 1980. *Imperialism: Pioneer of Capitalism*. Verso.



Discipline Specific Elective Course (DSE 27): Development Management I

Paper XIV (6)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

I. International Institutions and their Intervention Mechanisms

Workings of IMF, WB, WTO, ILO AND UN organisations and Interventions of WTO, ILO, UN in:

- Industry
- Agriculture
- Security and Rights

II. Functioning of National, State and Local Government

Interventions through market and non-market relations in:

- Food Security and agricultural sector
- Corporate, medium scale and informal sectors of industry
- Decentralization & PRI



Discipline Specific Elective Course (DSE 29): Experimental Economics I

Paper XIV (7)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Introduction: History, basics of experimental methods, advantages and limitations of economic experiments
[Lecture hours 4]

2. Methodology of Experiments in Economics [Lecture hours 12]

Experimental design, control vs treatment groups, randomization, induced value theory, instructions to subjects, internal vs external validity, classification of experiments, laboratory experiments: artificial and artefactual aspects of laboratories, field and natural experiments: Advantages and Challenges

3.Experiments on: [Lecture hours 12]

a) Social Preferences – Public Goods Experiment, Ultimatum Game, Dictator Game, Trust game,

b) Lying & Deception

c) Market-related experiments: auctions and asset markets

d) Individual preference experiments: time and risk

e) Non-monetized experiments: case studies

4.Experiments conducted in India [Lecture hours 4]

5.Survey of literature on i) Public Goods Games, ii) Ultimatum games, iii) Dictator games, iv) Prisoner's Dilemma [Lecture hours 6]

6.Introduction to Experiments in Economics using Z-tree [Lecture hours 8]

7.Other relevant topics in experimental economics [Lecture hours 4]

References

Davis, D. D., & Holt, C. A. (2021). *Experimental economics*. Princeton University Press.

Gupta, G. (2015). *An Introduction to Experimental Economics*, Orient Blackswan

Bardsley, N., Cubitt, R., Loomes, G., Moffatt, P., Starmer, C. & Sugden, R. (2010) *Experimental economics: Rethinking the rules*. Princeton University Press.

Plott, C. R., & Smith, V. L. (Eds.). (2008). *Handbook of experimental economics results* (Vol. 1). Elsevier. Kagel, J. H., & Roth, A. E. (Eds.). (2020). *The handbook of experimental economics, volume 2*. Princeton University Press.

Friedman, S., Friedman, D., & Sunder, S. (1994). *Experimental methods: A primer for economists*. Cambridge University Press.

Pablo Branas-Garza, Antonio Cabrales (2015) - *Experimental Economics, Volume I, Economic Decisions*-Palgrave Macmillan

Brañas-Garza, P., & Cabrales, A. (Eds.). (2016). *Experimental Economics: Volume II: Economic Applications*. Springer.

Weimann, J., & Brosig-Koch, J. (2019). *Methods in experimental economics*. Springer International Publishing.

Durlauf, S., & Blume, L. (Eds.). (2016). *Behavioural and experimental economics*. Springer.

Charness, G., & Pingle, M. (Eds.). (2022). *The Art of Experimental Economics: Twenty Top Papers Reviewed*. Routledge.



Jacquemet, N., & l'Haridon, O. (2018). *Experimental Economics: Method and applications*. Cambridge University Press.

N.B. Other references such as articles published in different journals will be referred to and provided with during the class lecture hours.



Discipline Specific Elective Course (DSE 31): Economics of Innovation I

Paper XIV (8)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Science, technology and innovation in the economic analysis:

Introduction: What is Innovation? How is it related to the economy? How can it be measured?

2. Microeconomics of innovation:

Innovation in making: Innovation, firms and market structure

Linkages, networks

Knowledge-intensive industries

Innovation and Entrepreneurship

3. Macroeconomics of Innovation:

Innovation, growth, job creation

Innovation and development: Economic catch up and Middle-income trap



Discipline Specific Elective Course (DSE 33): Labour Economics I

Paper XV (1)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. **Labour Demand theories**- The static theory of labour demand; Labour demand in the short run; Capital-Labour Substitution; Scale Effects; Beyond Two Inputs; Workers and Hours Trade-off [4 lectures]
2. **Labour Supply Theories**-Neoclassical Theory of Labour Supply [4 lectures]
3. **Human Capital, Individual Wage Determination, Schooling, Experience, and Earnings**- The Theory of Human Capital; Investment in human capital; Schooling and earnings; Education as a Signaling Device; Causal relation between education and -income [4 lectures]
4. **Unions and Collective Bargaining**- Bargaining Theory; Standard models of collective bargaining; evidence on effects of collective bargaining; dispute resolution, etc.; Risk sharing and Rent Sharing [4 lectures]
5. **Labor Migration**- Neoclassical models of labor migration; impacts on source and hostcountries; various positive and normative questions; policy issues [2 lectures]
6. **Shriking, Occupational Choice, Matching Models, Unemployment, etc.** [3 lectures]
7. **Policy Papers for Developing Countries** [2 lectures]
8. **The Economics of Discrimination** [2 lectures]
9. **Labour and Capitalism**- Transition from Feudalism to Capitalism ,Agrarian Labour-Farm and Non-farm, Industrial Labour, Informal Labour [8 lectures]
10. **Economic Growth, technology, automation and Labour** [5 lectures]
11. **Neoliberalism and Employment and changed labour dynamics** [12 lectures]

References:

1. Cahuc, Pierre, and Andre Zylberberg. [*Labor Economics*](#). Cambridge, Mass. and London: MIT Press, 2004. (Hereafter, **CZ**)
2. Ashenfelter, Orley, and Richard Layard. *The Handbook of Labor Economics*. Vol. 1 and 2. New York: North-Holland, 1986; Vol. 3A, 3B, and 3C, 1999.
3. Hamermesh, Daniel, (1993), *Labor Demand*. Princeton, NJ: Princeton University Press.
4. Main Journals to be used: *Journal of Labor Economics*, *Labour Economics*, *American Economic Review*, *Journal of Human Resources*, *Journal of Political Economy*, etc.
5. Huws, U., 2019. *Labour in contemporary capitalism: what next?*. Springer.
6. Morini, C., 2007. The feminization of labour in cognitive capitalism. *Feminist review*, 87(1), pp.40-59.
7. Elson, D., 2015. *Value: The representation of labour in capitalism*. Verso Books.
8. Menz, G., 2010. Employers, trade unions, varieties of capitalism, and labour migration policies. In *Labour migration in Europe* (pp. 25-53). Palgrave Macmillan, London.
9. Agrawal, A., Gans, J. and Goldfarb, A. eds., 2019. *The economics of artificial intelligence: an agenda*. University of Chicago Press.
10. Zeira, J., 1998. Workers, machines, and economic growth. *The Quarterly Journal of Economics*, 113(4), pp.1091-1117.
11. Standing, G., 2014. *A precariat charter: From denizens to citizens*. A&C Black.
12. Harriss-White, B. ed., 2009. *The comparative political economy of development*. Taylor & Francis.



Discipline Specific Elective Course (DSE 35): Economics of Agriculture I

Paper XV (2)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

Group A: Theories of Peasant Economy (20 Marks, 16 hours)

- Features of Peasant Societies
- Elements of Peasant Political Economy

- The Theories of Optimizing Peasant (profit-maximizing peasant, risk averse peasant, drudgery averse peasant, and sharecropping peasant)

- Women in Peasant Household.

References

Shanin, T (ed.) (1987), *Peasants and Peasant Societies*, 2nd Edition, Blackwell.

Ellis, Frank, *Peasant Economics*, Chs. 1, 3, and 4 to 9, CUP, 2nd Edition, 1993.

Akram-Lodhi, A. Haroon, and Cristobal Kay (eds.) (2009), *Peasants and Globalization: Political Economy, Rural Transformation and the Agrarian Question*, Routledge.

Scott, James C (2008), *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia*, Yale University Press.

Group B: Institutions and Markets in Backward Agrarian Economies (30 Marks, 24 hours)

- Land Institutions and Land Markets: Efficiency and Equity Issues
- Labour Contracts and Organisations
- Credit Contracts and Markets

- Agricultural Output Markets

References

B L Gardner and G C Rausser (eds.), *Handbook of Agricultural Economics*, Vol. 1A, Ch. 6, Elsevier, Amsterdam, 2001.

R Evenson and Prabhu Pingali (eds.), *Handbook of Agricultural Economics*, Vol. 3, Chs. 51, 52, 55, 56, Elsevier, Amsterdam, 2007.

Debraj Ray, *Development Economics*, Chs. 11 to 14, OUP, 1998.

Pranab Bardhan, *The Economic Theory of Agrarian Institutions*, OUP, 1989.

Pranab Bardhan and Christopher Udry (eds.), *Development Microeconomics*, OUP, 1999.



Discipline Specific Elective Course (DSE 37): Urban Planning I

Paper XV (3)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Urban Planning: Evolution – changing perspectives – necessity for socio-economic planning in Urban Development
2. Economics of Urban Planning-
 4. Urban Local Governance-Development of local self-governance after India's Independence, Local Self Governance after 73rd and 74th Constitutional amendments
 5. Approaches to Urban Planning: Institutions–Decentralised and Participatory Planning
 6. Developmental Planning-Land Use Control and Physical Planning
 7. Urban Waste Management-solid and liquid
 8. Tools for Planning
 - i. Decision-making Techniques (Cost-benefit Analysis)
 - ii. Introduction to Valuation and Pricing Real Estate, Environment, Infrastructure
 9. Information System and Urban Planning
 10. Urban Education
 11. Urban Environment

Reference:

- Evans A.W,(1985),Urban Economics, Basil Blackwell,
- Levy,(2012)Contemporary Urban Planning, Prentice Hall:NewYork, March
- www.gisdevelopment.net
- IndianInstituteofPublicAdministration,Delhi,(1978)CollectionofPapers,UrbanPlanningand Development Authorities,
- Jeffry Stabbs and Cailies Clark, (1976), Megacity Management in the Asian and Pacific Region: Policy Issues and Innovative Approaches, ADB: Manila
- JGKeskar,(1998),TheBasicsofTownPlanning,AllIndiaInstituteofLocalSelfGovernment,Mumbai.
- SylvieFaucheux&MartinO'Connor,(1998),ValuationforSustainableDevelopment:Methods and Policy Implications
- RobertLaurini,(2001),InformationSystemsforUrbanPlanning,TaylorandFrancis:NewYork
- D IsaacandTSteley(2000),PropertyvaluationTechniques,Macmillan:London



Discipline Specific Elective Course (DSE 39): Health Economics I

Paper XV (4)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

Uniqueness of Health Economics

- Scope of Health Economics: Uniqueness and Criticality
- Normative economics and health
- Difference between health and health care: Production and consumption
- Equity and Efficiency
- Health and Development

Measurements of Health

- Health through the life cycle
- Morbidity and Mortality
- Burden of Diseases
- Concepts of DALY and QALY
- Epidemiology and Morbidity Transition

The Micro Scenario: Issues related to Health Care Utilization

- Preventive and Curative Health care: Changes in demand for prevention with epidemiological changes
- Public Health and political economy
- Socio-economic determinants of health
- Mental health

Externalities in health

- Presence and control of externalities
- Education
- Nutrition
- Sanitation

References

1. Cuyler A and J Newhouse (ed) (2000), *Handbook of Health Economics*. Elsevier.
2. Das Gupta Monica, Lincon Chen and T Srinivasan (1996), *Health, Poverty and Development in India*. OUP
3. Phelps Charles, *Health Economics* (2018). Routledge.
4. Santerre R and S Neun (2007), *Health Economics: Theories, Insights and Industry Studies*. Thompson.
5. World Health Organization (2010), *Socioeconomic Determinants of Health*.
6. Zweifel P (1997), *Health Economics*.



Discipline Specific Elective Course (DSE 41): Resource & Environmental Economics I

Paper XV (5)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Environmental Economics: The Theory of Optimal Pollution and Pollution Regulation
[10 lecture hours]

- The Green Economy. Laws of Thermodynamics. Economy and Environment: The Circular Flow. Renewable vs. Non renewable resources.
- Optimal Level of Pollution. Property Rights and Pollution. Market achievement and optimal pollution: The Coase Theorem.
- Taxation of Optimal Pollution : The Pigovian tax under perfect and imperfect completion
- Environmental standards, taxes and subsidies
- Marketable Pollution permits

References

- (i) Pearce , D. and Turner, R. : *Economics of Natural Resources and the Environment*: Johns Hopkins University Press (Chapters 2, 4, 5,6, 7,8), USA.
- (ii) Hanley N, Shogren J.F. and White B. *Environmental Economics in Theory and Practice*, Macmillan.
- (iii) Kolstad C, *Environmental Economics*, OUP
- (iv) Baumol, W.J. and Oates, W.: *The Theory of Environmental Policy*, 2nd Edition, CUP

2. Computational Methods in Environmental and Resource Economics

[8 lecture hours]

- Optimal control methods, value function iteration, Time iteration, Methods for infinite horizon problems, Robust decision-making approach,
- Nonlinear Certainty Equivalent Approximation, Approximate Dynamic Programming, Real Options Analysis, Solving Principal-Agent Models,
- Continuous-time dynamic programming problems
- Reduced-Form Versus Structural Modeling in Environmental and Resource Economics,
- Use of experimental methods in Environmental and resource economics,
- Other methodological approaches to environmental and resource economics

References

- (i) Conrad, J.M. and Clark, C.W. : *Natural Resource Economics-Notes and Problems*, CUP
- (ii) Chiang, A.C. : *Elements of Dynamic Optimization*, Mc-Graw Hill
- (iii) Cai, Y. (2019). Computational methods in environmental and resource economics. *Annual Review of Resource Economics*, 11, 59-82.
- (iv) List, J. A., & Price, M. K. (2020). The use of field experiments in environmental and resource economics. *Review of Environmental Economics and Policy*.
- (v) Cherry, T. L., Kroll, S., & Shogren, J. (2007). *Environmental economics, experimental methods*. Routledge.

3. Economics of Non Renewable Resources

[6 lecture hours]

- A simple 2-period framework and the concept of Backstop;
- Extension to Dynamic Model of Mining with modified Hotelling's Rule;
- Depletion & Discovery under alternative market structures;



References

- (i) Hanley, N., Shogren, J., & White, B. (2019). *Introduction to environmental economics*. Oxford University Press.
- (ii) Bhattacharya, R.N.(2001):*Environmental Economics: An Indian Perspective*. Oxford University Press, USA.

4. Economics of Oil and Natural Gas as a Non Renewable Resource [6 lecture hours]

- Basic macroeconomics of an oil economy;
- Economic and geographical factors affecting irreversible investment in an oil field.
- Global economic activity and crude oil prices.

References

- (i) Alam, M. S. (1982). The basic macro-economics of oil economies. *The journal of development studies*, 18(2), 205-216.
- (ii) Bekiros, S., Gupta, R., & Paccagnini, A. (2015). Oil price forecastability and economic uncertainty. *Economics Letters*, 132, 125-128.
- (iii) He, Y., Wang, S., & Lai, K. K. (2010). Global economic activity and crude oil prices: A cointegration analysis. *Energy Economics*, 32(4), 868-876.
- (iv) Hurn, A. S., & Wright, R. E. (1994). Geology or economics? Testing models of irreversible investment using North Sea oil data. *The Economic Journal*, 104(423), 363-371.
- (v) Anderson, D. A. (2010). *Environmental economics and natural resource management*. Routledge.

5. Economics of Fishery and Aquaculture as a Renewable Resource [8 lecture hours]

- The static model of fishery-Bio-economic model, the concept of maximum sustainable yield and economic maximum
- The dynamic model of fishery- The catch locus under well defined property rights and open access.
- Mangrove-Fishery linkages under alternative policy regimes. Simulation vs Sensitivity.
- The concept of Fish Biodiversity and its applications.
- Aquaculture Shrimp Farms vs Fishery
- The spawner-recruit model

References

- (i) Pearce , D. and Turner, R. : *Economics of Natural Resources and the Environment*: Johns Hopkins University Press
- (ii) Conrad, J.M. and Clark, C.W. : *Natural Resource Economics-Notes and Problems*, CUP
- (iii) Bhattacharya, R.N. : 'Economics of Natural Resources' in R.N. Bhattacharya (ed) *Environmental Economics-An Indian Perspective*, OUP
- (iv) Fisher, A.C. : *Resource and Environmental Economics*, CUP
- (v) Kasulo, V. and Perrings, C. : 'Fishing Down The Value Chain', *Ecological Economics*, 2006, 59(1) : 106-114.
- (vi) Anderson, J.L. : 'Market Interaction between Aquaculture and Common-Property Commercial Fishery', *Marine Resource Economics*, 1985, 2(1): 1-24.
- (vii) Hanley N, Shogren J.F. and White B. *Environmental Economics in Theory and Practice*, Macmillan.
- (viii) Perman, R., Ma, Y., McGilvary, J. and Common,M. : *Natural Resource and Environmental Economics*, 2nd edition, Prentice Hall.
- (ix) Gupta, K. 'Mangrove-Fishery Linkages under Alternative Policy Regimes', in N. Sengupta and J. Bandyopadhyay (eds), *Biodiversity and Quality of Life*, Macmillan, 2005

(x) Economics of Forestry as a Renewable Resource [6 lecture hours]

- Forestry: Single versus Multiple use Forest
- Optimal Rotation and Faustman's Rule



References

Hanley, N., Shogren, J., & White, B. (2019). *Introduction to environmental economics*. Oxford University Press.

(xi) Economics of Water Resource

[6 lecture hours]

- Concepts of valuing water
- Pricing of water
- Modeling and policies of water resources
- Groundwater depletion and economic consequences: some case studies

References

- (i) Roumasset, J., & Wada, C. (2012). The economics of groundwater. *Encyclopedia of Energy, Natural*.
- (ii) Konikow, L. F., & Kendy, E. (2005). Groundwater depletion: A global problem. *Hydrogeology Journal*, 13(1), 317-320.
- (iii) Bierkens, M. F., & Wada, Y. (2019). Non-renewable groundwater use and groundwater depletion: a review. *Environmental Research Letters*, 14(6), 063002.
- (iv) Sayre, S. S., & Taraz, V. (2019). Groundwater depletion in India: Social losses from costly well deepening. *Journal of Environmental Economics and Management*, 93, 85-100.
- (v) Roumasset, J. A., & Wada, C. A. (2010). Optimal and sustainable groundwater extraction. *Sustainability*, 2(8), 2676-2685.
- (vi) Booker, J. F., Howitt, R. E., Michelsen, A. M., & Young, R. A. (2012). Economics and the modeling of water resources and policies. *Natural Resource Modeling*, 25(1), 168-218.
- (vii) Jacoby, H. G. (2017). "Well-fare" economics of groundwater in South Asia. *The World Bank Research Observer*, 32(1), 1-20.



Discipline Specific Elective Course (DSE 43): Marxian Economics I

Paper XV (6)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

What is Marxian Theory: Epistemology and entry point: Contending Neoclassical, Keynesian and Marxian Theory; Dialectics, overdetermination and entry point (**8 hours**)

Historical Materialism and Transition: Forces of production, class and relations of production, superstructure and social being; Two approaches to Historical Materialism: Dialectical Materialism and Functional Explanation; Class actor, Class struggle, Class formation; Society, Transition and History (**16 hours**)

Debates in Historical Materialism: Dialectical materialism: Hegel, Althusser and Post-structuralism; Class theories: Power, property and surplus labor; Transition debates (Dobb-Sweezy debate, Brenner debate, mode of production debate, underdevelopment and socialist transition; unequal exchange) (**16 hours**)

Introducing Class-focused Marxian Theory: Marx's critique of Classical Political Economy; Labor power, labor process, necessary labor, surplus labor and class; class and modes of appropriation: exploitation, non-exploitation and self-appropriation (**10 hours**)

References

1. Burczak, Ted, Rob Garnett, and Richard McIntyre. 2017. *Marxism without Guarantees: Economics, Knowledge, and Class*. Routledge.
2. [Brennan](#), David, M, [David Kristjanson-Gural](#), [Catherine P. Mulder](#), [Erik K. Olsen](#) (ed.). 2017. *Routledge Handbook of Marxian Economics*. Routledge.
3. Chakrabarti, A. and Cullenberg, S. 2003. *Transition and Development in India*. Routledge.
4. Cohen, G.A. 1978. *Karl Marx's Theory of History: A Defence*. Princeton University Press.
5. Cohen, G.A. 1988. *History, Labour and Freedom: Themes from Marx*. Clarendon Press.
6. Howard, M and King, J. 1989. *A History of Marxian Economics 1883-1929. Vol1*. Princeton University Press.
7. Howard, M and King, J. 1992. *A History of Marxian Economics 1929-1990. Vol1*. Princeton University Press.
8. Resnick, S. A. and Wolff, R. D. 1987. *Knowledge and Class: A Marxist Critique of Political Economy*. University of Chicago Press.
9. Resnick, S. A. and Wolff, R. D. 2006. *New Departures in Marxian theory*. Taylor and Francis.
10. Resnick, S. and R. Wolff. 2012. *Contending Economic Theories*. MIT Press.
11. Roemer, J. (ed.) (1986) *Analytical Marxism*. Cambridge University Press.
12. Ruccio, D. 2022. *Marxian Economics: An Introduction*. Polity



Discipline Specific Elective Course (DSE 45): Gender Economics I

Paper XV (7)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Women and neoclassical economics -Becker, Household economics [5 lectures]
2. Critiquing Rational Economic Man-Feminist Economics [10 lectures]
3. Gender and labour- Marxist theory, Boserup, Beneria, Theory of Social Reproduction, Unpaid labour and Intra-household bargaining [10 lectures]
4. Gender and Macroeconomics -National Income, Growth, Public economics, Finance [8 lectures]
5. Gender and Trade [2 lectures]
6. Women and Development-Goldin's U curve, Development dynamics and gender difference [5 lectures]
7. Gender and Human Development -Capability Approach, Sen, Naussbaum [5 lecture]
8. Institutions, Norms and Gender [5 lectures]

References:

- Berik, G. and Kongar, E. eds., 2021. *The Routledge handbook of feminist economics*. Routledge.
- Becchio, G., 2019. *A History of Feminist and Gender Economics*. Routledge.
- G. Hewitson, 1999. *Feminist Economics: Interrogating Rational Economic Man*, Edwar Elgar
- Nussbaum, M.C., 2001. *Women and human development: The capabilities approach* (Vol. 3). Cambridge University Press.
- Kan, S. and Klasen, S., 2021. MACROECONOMICS AND GENDER. *Women's Economic Empowerment: Insights from Africa and South Asia*.
- Schultz, T.P. ed., 1995. *Investment in women's human capital*. University of Chicago Press.
- Benería, L., 1979. Reproduction, production and the sexual division of labour. *Cambridge Journal of Economics*, 3(3), pp.203-225.
- Boserup, E., Tan, S.F. and Toulmin, C., 2013. *Woman's role in economic development*. Routledge.
- Beneria, L. and Sen, G., 1981. Accumulation, reproduction, and" women's role in economic development": Boserup revisited. *Signs: Journal of women in culture and society*, 7(2), pp.279-298.



Semester-IV (22 credits, 250 marks)

Generic Elective (GE2): Indian economics

Paper XVI

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. National Income

Official estimates: National Accounts Statistics; Growth and structural change; Sectoral composition; Features of high growth regime

[Lecture hours 4]

2. Agriculture

Technologies and institutions; Land relations and land reforms; Rural credit; Modern farm inputs and marketing—price policy and subsidies; Commercialisation and diversification; Agriculture and WTO; Food processing, subsidies, Agricultural prices and public distribution system; Impact of public expenditure on agricultural growth.

[Lecture hours 5]

3. Industry

Strategy of industrial development— Industrial Policy Reform; Reservation policy relating to small scale industries; Sources of industrial finances - bank, share market, insurance companies, pension funds, non-banking sources and foreign direct investment; Role of foreign capital for direct investment and portfolio investment; Public sector reform, privatisation and disinvestment.

[Lecture hours 5]

4. Planning:

From central Planning to indicative planning; Relation between planning and markets for growth; Alternative development strategies—goal of self-reliance based on import substitution and protection; Stabilisation and structural adjustment packages - fiscal reforms, financial sector reforms and trade reforms.

[Lecture hours 5]

5. Federal Finance

Fiscal Federalism and Fiscal Consolidation; Constitutional provisions relating to fiscal and financial powers of the States; Finance Commissions and sharing of taxes; Financial aspect of Sarkaria Commission Report, financial aspects of 73rd and 74th Constitutional Amendments.

[Lecture hours 4]

6. Fiscal Policy

Fiscal reforms – Tax Reforms: Introduction of Goods and Services Tax, Reforms in expenditure, pension and budgetary deficits; Public debt management and reforms; Fiscal Responsibility and Budget Management (FRBM) Act;



Black money and Parallel economy in and remedies, demonetisation and black money.

India—definition, estimates, genesis, consequences

[Lecture hours 5]

7. Financial sector reforms

Organisation of India's money market; Changing roles of the Reserve Bank of India, commercial banks, development finance institutions, foreign banks and non-banking financial institutions; Indian capital market and SEBI; Development in Global Financial Market and its relationship with Indian Financial Sector; Commodity Market in India-Spot and Futures Market, Role of FMC.

[Lecture hours 7]

8. Poverty, Unemployment and Human Development

Estimates of inequality and poverty measures for India; Appraisal of Government measures; India's human development index in global perspective; Poverty and Inequality after reforms; Rural development programmes including poverty alleviation programmes, development of economic and social infrastructure

[Lecture hours 5]

9. Inflation

Definitions: Core inflation, headline inflation, wholesale price index (WPI), consumer price index trends (CPI), Official estimates based on WPI and CPI; Consequences, components and trends.

[Lecture hours 4]

10. Labour

Concepts and measurement of employment, unemployment and underemployment: different NSS rounds on employment and unemployment survey; Urban labour market and informal sector employment; Employment and poverty; Strategies for employment generation; Social issues relating to labour - child labour; New Rural Employment Guarantee Scheme—MGNAREGA

[Lecture hours 6]

11. Urbanisation and Migration

Different types of migration and their impact on the economies of their origin and destination; Process of growth of urban settlements; Urban development strategies.

[Lecture hours 4]

12. Foreign trade

Features of India's foreign trade; Composition, direction and organisation of trade; Recent changes in trade policy and tariff policy; Trends in balance of payments and exchange rate; Partial and full convertibility; Capital account convertibility; India and WTO - bilateral Trade Agreements and their implications; Intellectual property rights : implications of TRIPS, TRIMS, GATS and new EXIM policy.

[Lecture hours 6]



Core course (CC 12): Group Project-II

Paper XVII

Course Credit – 6

Total Lecture Hours: 50

Full Marks 50



Discipline Specific Elective Course (DSE 2): Advanced Macroeconomics II

Paper XVIII (1)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Topics from Recursive Macrodynamics. (4 lectures)
2. Topics from Growth Economics. (10 lectures)
3. Topics from money and labour market frictions. (6 lectures)
4. Asset Pricing Models. (5 lectures)
5. Topics from Disequilibrium Macroeconomics. (25 lectures)

References

Romer, D., *Advanced Macroeconomics* (4th Edition), McGraw-Hill, New York, 2012.

Ljungqvist L. and T. Sargent, T., *Recursive Macroeconomic Theory* (4th Edition), MIT Press, 2018



Discipline Specific Elective Course (DSE 4): Game Theory and Information II

Paper XVIII (2)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

- Introduction to economics of information
- Value of information
- Hidden Information – Adverse selection problem
 - Screening and signaling - applications
- Hidden Action – Moral hazard problem
 - Principal agent framework - applications
- Strategic information transmission
- Information Cascades and Herding

References:

1. Microeconomic Theory – MasCollé, Whinston and Green
2. An Introduction to the Economics of Information: Incentives and Contracts - Macho-Stadler and J. D. Perez-Castrillo
3. The Theory of Incentives – Laffont and Martimort



Discipline Specific Elective Course (DSE 6): International Economics II

Paper XVIII (3)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Mixed models on perfectly and imperfectly competitive trade structures [3 lecture hours]

Product differentiation and increasing returns to scale in an otherwise general equilibrium trade model. The issue of quality differentiation in competitive general equilibrium trade models.

References

- (i) Acharyya, R and Jones, R.W. (2001): 'Export Quality and Income Distribution in a Small Open Economy,' *International Review of Economics and Finance*, 10: 337–351.
- (ii) Sen, P., Ghosh, A. and Barman, A. (1997) : 'The Possibility of Welfare Gains with Capital Inflows in a Small Tariff-Ridden Economy,' *Economica*, 64: 345-352.

2. Elements of International Trade and Organization of Firms: The New 'New International Trade Theory'

[8 lecture hours]

Trade and Organization of Firms: Models of Melitz (2003), Antras (2003) and Helpman (2006)

References

- (i) Melitz, M.J. (2003): 'The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity', *Econometrica*, 71(6): 1695-1725.
- (ii) Antras, P. (2003) : ' Firms, Contracts and Trade Structure', *Quarterly Journal of Economics*, 118(4): 1375-1418.
- (iii) Helpman, E.(2006): ' Trade, FDI, and the Organization and of Firms', *Journal of Economic Literature*, 44(3): 589-630.

3. Oligopoly and International Trade : Strategic Trade Policy [6 lecture hours]

- Homogeneous goods, Oligopoly and Trade: Cournot type Model. Effects of tariffs and subsidies-The Brander-Spencer (1985) model.
- Vertically Differentiated Goods, Oligopoly and Trade : The Consumers side, firms and market equilibrium , the role of international trade
- Horizontal Differentiation, Oligopoly and Trade: Demand for characteristics, the production side, international trade and strategic trade policy.

References

- (i) G. Gandolfo: *International Trade Theory and Policy*, Springer, 2006.
- (ii) Brander,J., and Spencer, B. (1985): 'Export Subsidies and International Market Share Rivalry', *Journal of International Economics*, 18(1-2): 83-100.

4. Trade and Environment

[4 lecture hours]

- Trade and Environment-basic issues : The Copeland-Taylor (2004) Model



- Trade, Environment and Property Rights in a North-South Model : The Chichilinsky (1994) Model
- International Trade and the Environmental Kuznets Curve: Explanations through Scale, Composition and Technological Effects
- Migration of Dirty Industries : Displacement Hypothesis and the Pollution Haven Hypothesis
- Symmetric Fear and Impossible Trinity of Global Environmental Regulation
- Climate Change and Greenhouse Gas Emissions –The Kyoto Protocol-Carbon Credit Market and Clean Development Mechanism

References

- (i) Copeland, B.R., and Taylor M.S. (2004): ‘Trade, Growth and Environment’, *Journal of Economic Literature*, 42(1) : 7-71
- (ii) Chichilnisky, G. (1994) : ‘North-South Trade and the Global Environment’, *American Economic Review*, 84(4): 851-874.
- (iii) Dinda, S. (2004) : ‘Environmental Kuznets Curve Hypothesis: A Survey’, *Ecological Economics*, 49(4), 431-455.
- (iv) Frankel, J. (2020): ‘*Trade , Growth and the Environment*’, Harvard Kennedy School Lecture, Harvard University, USA.

5. Empirical Issues in Trade

[4 lecture hours]

- Revealed Comparative Advantage and its empirical implications
- Gravity Models : implications for Bilateral and Multilateral Trade, implications for panel data analysis,-the role of iceberg costs
- Intra-industry Trade: The Grubel-Lloyd Index

References

- (i) Feenstra, R.C. (2002) : *Advanced International Trade : Theory and Evidence*, Princeton University Press, USA, 2002.
- (ii) Bergstrand, J. H. (1985): The Gravity Equation in International Trade: Some Microeconomic Foundations and Empirical Evidence’, *Review of Economics and Statistics*, 67(3): 474-481.
- (iii) Panchamukhi, V.R. (1997) : ‘Quantitative Methods and their Applications in International Economics,’ in K.L. Krishna (ed) ‘*Econometric Applications in India*, OUP.
- (iv) Grubel, H. and Lloyd, P.J. (1975) : ‘Intra-Industry Trade : Theory and Measurement of of International Trade in Differentiated Products’, Willey, New York, 1975
- (v) Grubel, H. and Lloyd, P.J. (2007) : ‘The Empirical Measurement of Intra-Industry Trade’, *Economic Record*, 47(4): 494-517

6. Topics in Trade and Development

[6 lecture hours]

- Problems of Trade in Primary Commodities : Terms of Trade and Unequal Exchange: From Prebisch-Singer to Emmanuel
- Bilateral Transfers in a multilateral world : Implications for Trade, Welfare and Development
- Trade, Development and the Choice between Capital and Labour Mobility
- Outsourcing and its implications for trade and development

References

- (i) Acharyya, R. and Kar, S. (2013) : ‘*International Trade and Economic Development*’, OUP.
- (ii) Bhagwati, J.N., Brecher, R.A., and Hatta, T. (1983) : ‘The Generalized Theory of Transfers and Welfare: Bilateral Transfers in a Multilateral world’, *American Economic Review*, 73(4): 606-618.



- (iii) Bhagwati, J.N. and Srinivasan, T.N. (1983) : ‘ On the Choice between Capital and Labour Mobility’, *Journal of International Economics*, 14: 209-221.
- (iv) Bhagwati, J.N., Panagariya, A. and Srinivasan, T.N. (2004) : ‘The Muddles over Outsourcing’, *Journal of Economic Perspectives*, 18(4): 93-114.

7. The Economics of Regional Trading Agreements

[4 lecture hours]

- Multilateralism and Regionalism: Theories of Regional Trading Agreements
- Empirical issues related to Regionalism

References

- (i) Lipsey, R.G. (1960), “The Theory of Customs Unions: A General Survey”, *The Economic Journal*, 70(279), pp.496-513.
- (ii) Ethier, W.J. (1998) : ‘Regionalism in a Multilateral World’, *Journal of Political Economy*, 106(6) : 1214-1245.
- (iii) Acharyya, R. (2014): *International Economics*, OUP..
- (iv) Sebastian E. & Igal M. (2003): ‘A Currency of One's Own? An Empirical Investigation on Dollarization and Independent Currency Unions,’ *NBER Working Papers* 9514, NBER.
- (v) Yang, S and Inmaculada M-Z (2014): ‘A Panel Data Analysis of Trade Creation and Trade Diversion Effects: The Case of ASEAN–China Free Trade Area’, *China Economic Review*, 29: 138–151.

8. Political Economy of Trade Policy

[5 lecture hours]

- Directly Unproductive (DUP) Lobbying Activities
- The Median Voter Model
- Bilateral and Multilateral Free Trade and Median Voters in a 2x2x2 Heckscher-Ohlin structure
- Payoff function of the politician in a general equilibrium trade model
- Models on endogenous trade protection
- Lobbying and Endogenous Tariffs
- Domestic Politics, Foreign Interests and International Trade Policy

References

- (i) Feenstra, R.C. (2002) : *Advanced International Trade : Theory and Evidence*, Princeton University Press, USA, 2002.
- (ii) Bhagwati, J.N. (1982) : ‘Directly Unproductive Profit-Seeking (DUP) Activities’, *Journal of Political Economy*, 90(5): 988-1002.
- (iii) Chaudhuri, S., Gupta, K. and Marjit, S. (2022) : ‘New Protectionism and Political Economy of Immigration of Skilled Labour’, *forthcoming* in Gupta, K. and Dwivedi, J.K. (eds), *International Trade, Economic Development and Welfare: Essays in Memory of Sarbajit Chaudhuri*, Routledge Publishers, UK.
- (iv) Findlay, R., and Stanislaw, W. (1982) : ‘Endogenous Tariffs, the Political Economy of Trade Restrictions and Welfare’, in Bhagwati, J.N. (ed) , *Import Competition and Response*, University of Chicago Press, USA.
- (v) Magee, S.P. and Magee, C.S.P. (2010) : ‘Endogenous Tariff Protection : A Survey’, in Coen, D., Grant, W., and Wilson, G. (eds) ‘*The Oxford Handbook of Business and Environment*’, OUP.
- (vi) Pecorino, P. (1998), Is There a Free-Rider Problem in Lobbying? Endogenous Tariffs, Trigger Strategies, and the Number of Firms, *American Economic Review*, 88 (3): 652-660.
- (vii) Hillman, A. L. , and Ursprung, H.W. (1988): ‘Domestic Politics, Foreign Interests, and International Trade Policy’, *American Economic Review*, 78 (4):729-745
- (viii) Facchini, G. , and Willmann, G. (2005): ‘The Political Economy of International Factor Mobility’, *Journal of International Economics*, 67: 201-219.



Discipline Specific Elective Course (DSE 8): Urban Economics II

Paper XVIII (4)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Urban Sustainability – Environment and Pollution – The Economics of Pollution Control
2. Sectoral Issues:
 - (i) Urban Land Market and Land Use
 - (ii) Urban Labour Market and Migration
 - (iii) Rural-urban Relationship – Linkages and Flows – Changing Perspective
3. Urban poverty - slum and informal sector – Urban Poverty in India
4. Urban Infrastructure – Issues related to Facilities and Service Delivery, Special infrastructure like Port.
5. Urban Local Government - Constitutional Amendment and after – issues related to Governance and Finance

References:

- Harvey, David, (1989), The Urban Experience, The John Hopkins University Press, Baltimore
- Hallett Graham (1985), Urban Land Economics
- Harvey, Jack, (2000), Urban Land Economics, New York, Palgrave
- Evans, Alan (1985) Urban Economics, An Introduction, Basil Blackwell.
- Beal Jo and Sean Fox (2009), Cities and Development, Routledge
- Kundu A (ed) (2010), India Urban Poverty Report, Oxford
- India Infrastructure Report (2006) Urban Infrastructure, 3i Network



Discipline Specific Elective Course (DSE 10): Economics of Industry II

Paper XVIII (5)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

Advertising (10 lectures)

Price advertising decisions: Dorfman - Steiner model – Informative advertising - Persuasive advertising - Welfare effects

R&D and Intellectual Property (10 lectures)

Innovation and R&D – Market structure and incentive to innovate – Patents – Optimal patent length and breadth, Licensing;

Markets with network effect (5 lectures)

Direct and indirect effects – switching costs

Indian Industries (7 lectures)

Industrial Policies. Manufacturing sector: Current scenario, market size, investment plans and policies, organized and unorganized sectors- functioning,

Labour Relations and Industrial Disputes (4 lectures)

Causes of disputes, industrial relations, policies of government, trade unions

Industrial Statistics (8 lectures)

ASI, CMIE, ILOSTAT data – concepts, definitions

National Industrial Classification, Index of Industrial Production

Studies on Indian Manufacturing Industries (6 lectures)

Productivity and efficiency – total factor productivity growth, technical efficiency

References

- P. Bellaflame and M. Peitz: Industrial Organization and Market Structure
- Tirole: The Theory of Industrial Organization
- Oz. Shy: Industrial Organization
- Economic Survey of India
- ASI Manual
- GoKarn, Sen and Vaidya: The structure of Indian Economy
- Kathuria, Raj and Sen, *Organized vs Unorganized Manufacturing Performance in Manufacturing Industries*, EPW, 2010

- Ghosh and Neogi, *Productivity, Efficiency and New technology: the case of Indian manufacturing industries*, The Developing Economies, 1993
- Bhandari and Maiti, *Efficiency of Indian Manufacturing Firms: Textile Industry as a Case Study*, International Journal of Business and Economics, 2007
- Kumbhakar and Knox Lovell, *Stochastic Frontier Analysis*, Cambridge University Press.



Discipline Specific Elective Course (DSE 12): Public Economics II

Paper XVIII (6)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

- The reasons for public choice: o allocative efficiency o redistribution
- Fundamental issues in public choice of preference revelation
 - o aggregation of preference - Arrow's Impossibility Theorem o aggregation of information
- Public choice in a direct democracy
 - o Political competition over a single issue: citizen candidate model
 - o Choice of Voting Rules – Unanimity versus majority rule. Alternative voting procedures.
- Public choice in a representative democracy
 - o Party Competition: Uni-dimensional policy spaces with uncertainty
 - o Endogenous party formation
 - o Rent-seeking and lobbying
 - o The role of bureaucracy

References:

5. Microeconomics of Market Failure – Bernard Salanie
6. Economics of Taxation - Bernard Salanie
7. Political Competition: Theory and Applications – John E. Roemer
8. Public Choice III – Dennis Mueller



Discipline Specific Elective Course (DSE 14): Behavioural Economics II

Paper XVIII (7)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

Behavioral Game Theory- an introduction

(15 lectures)

Coordination game, bargaining game, asymmetric information, signaling and cheap talk, models of behavioral game theory

Bounded Rationality

(15 lectures)

Heuristics and bias, nudge theory, bounded rationality in financial markets

Human Behavior and Development Policy

(15 lectures)

Biases in assessing value, Influence of social networks and social norms on individual decision making, Psychological and social perspectives on policy
Poverty, health and household finance in social context, design of policy.

Neuroeconomics- an introduction

(5 lectures)

Introduction to brain, neuroeconomics techniques.
Neuroeconomics of risky decisions, social preferences and time preferences

References

The Foundations of Behavioral Economic Analysis, Dharami, N. Oxford University Press

Mind, Society and Behavior. World Development Report, 2015

An Introduction to Behavioral Economics, N. Wilkinson and M. Klaes (2012), Palgrave Macmillan.

“Psychology and Economics.”, Rabin, Matthew. 1998, Journal of Economic Literature 36(1): 11-46.



Discipline Specific Elective Course (DSE 16): Social Economics II

Paper XVIII (8)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Social relations in the economy: Social capital, social preferences, and norms

[16 lecture hours]

- Social capital- definitions, types and measures, theoretical and empirical contributions of social capital, limitations of social capital, the link between identity, social capital, power, and values
- Social preferences: definitions, measures, and methods to test social preferences; the link between social preferences and group identity; self-interest, social preferences, and redistributions- economic incentives and social preferences; Becker's theory of social interaction
- Social norms: contexts and economic analysis, social norms and pro-social behavior, norms as a barrier

2. Social economics of Macroeconomic issues [6 lecture hours]

- Money as a social institution: its historical emergence and policy implication
- Social economics of growth and income inequality
- Global finance and development
- Other macroeconomic issues

3. Social enterprises [2 lecture hours]

- Institutions of livelihood and social enterprise systems

4. Poverty and social exclusions [6 lecture hours]

- Multi-dimensional deprivation; income, material deprivation, and social exclusion
- Social economics, poverty, and human development: conceptual approaches, empirical analysis, and policy.

5. Social economics of environmental issues [8 lecture hours]

- Socioecological economics; economic growth and the limits to environmental regulation: a social economic analysis
- Social economics and risk analysis
- Distributional issues in ecological economics
- Social capital, status, and participatory inequality in natural resource management
- Any other social ecological economic issue

6. The State, law, and social economics [4 lecture hours]

- The welfare state and privatization
- The states of social economics
- Law and social economics



7. Other issues of social economics [8 lecture hours]

References

Books

- Anderson, R. W. (1976). *Economics of Crime*. Macmillan International Higher Education.
- Barrett, C. B. (2006). *The social economics of poverty*. Routledge.
- Becker, G. S. & Landes, W. M. (Eds.). *Essays in the economics of crime and punishment*. NBER, New York: Columbia U. Press, 1974.
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- Benhabib, J., Bisin, A., & Jackson, M. O. (Eds.). (2010). *Handbook of social economics*. Elsevier.
- Betti, G., & Lemmi, A. (Eds.). (2013). *Poverty and social exclusion: New methods of analysis*. Routledge.
- Clary, B. J., Dolfsma, W., & Figart, D. M. (2006). *Ethics and the market: Insights from social economics*. Routledge.
- Davis, J. B. (2003). *The theory of the individual in economics: identity and value*. Routledge.
- Davis, J. B. (2010). *Individuals and identity in economics*. Cambridge University Press.
- Davis, J. B. [2018]: Ethics and Economics: A Complex Systems Approach. In: White, M. D. (Ed.): *Handbook of Ethics and Economics*. Oxford University Press.
- Davis, J. B. (2021). Social economics. *Elgar Handbook of Alternative Theories of Political Economy*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3847356
- Davis, J. B., & Dolfsma, W. (Eds.). (2010). *The Elgar companion to social economics*. Edward Elgar Publishing.
- Fang, H., & Moro, A. (2011). Theories of statistical discrimination and affirmative action: A survey. *Handbook of social economics, I*, 133-200.
- Folbre, N. (2021). *The Rise and Decline of Patriarchal Systems: An Intersectional Political Economy*. London: Verso Books.
- Graafland, J. (2021). *Ethics and Economics: An Introduction to Free Markets, Equality and Happiness*. Routledge.
- Peil, J., & van Staveren, I. (Eds.). (2009). *Handbook of economics and ethics*. Edward Elgar Publishing.
- Pressman, S. (Ed.). (2020). *How Social Forces Impact the Economy*. Routledge.
- O'Boyle, E. (Ed.). (2005). *Social economics: Premises, findings, and policies*. Routledge.
- Rodgers, W. M. (2009). *Handbook on the Economics of Discrimination*. Edward Elgar Publishing.
- Rycroft, R. S. (2017). *The economics of inequality, discrimination, poverty, and mobility*. Routledge.
- Serageldin, I., & Dasgupta, P. (2001). *Social capital: A multifaceted perspective*. The World Bank.

Wight, J.B. (2015). *Ethics in economics: An introduction to moral framework*, Stanford University Press.

Articles

- Ahmed, A. M., & Hammarstedt, M. (2008). Discrimination in the rental housing market: A field experiment on the Internet. *Journal of Urban Economics*, 64(2), 362-372.
- Akerlof, G. and Kranton, R. (2000). Economics and identity, *Quarterly Journal of Economics*, 115(3), 715–53.
- Arrow, K. J. (1973), The Theory of Discrimination, in O. Ashenfelter and A. Rees (eds.), *Discrimination in Labor Markets*, Princeton, NJ: Princeton University Press.
- Arrow, K. J. (1998). What has economics to say about racial discrimination?. *Journal of economic perspectives*, 12(2), 91-100.
- Ball, S., & Eckel, C. C. (1998). The economic value of status. *The Journal of socio-economics*, 27(4), 495-514.



- Ball, S., Eckel, C., Grossman, P. J., & Zame, W. (2001). Status in markets. *The Quarterly Journal of Economics*, 116(1), 161-188.
- Banerjee, A., Bertrand, M., Datta, S., & Mullainathan, S. (2009). Labor market discrimination in Delhi: Evidence from a field experiment. *Journal of Comparative Economics*, 37(1), 14-27.
- Barrett, C. B. (2006). On the relevance of identities, communities, groups, and networks to the economics of poverty alleviation. In: Barrett, Christopher B (Ed). *The social economics of poverty*. Routledge, 2006, 1-11.
- Bayer, P., Casey, M., Ferreira, F., & McMillan, R. (2017). Racial and ethnic price differentials in the housing market. *Journal of Urban Economics*, 102, 91-105.
- Bertrand, M., & Mullainathan, S. (2004). Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination. *American Economic Review*, 94(4), 991-1013.
- Booth, D. E. (1995). Economic growth and the limits of environmental regulation: a social economic analysis. *Review of Social Economy*, 53(4), 553-573.
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- Christoforou, A. (2013). On the identity of social capital and the social capital of identity. *Cambridge Journal of Economics*, 37(4), 719-736.
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- Darity Jr, W. A. (2022). Position and Possessions: Stratification Economics and Intergroup Inequality. *Journal of Economic Literature*., 60(2), 1–27.
- Darity, W. A., & Mason, P. L. (1998). Evidence on discrimination in employment: Codes of color, codes of gender. *Journal of Economic Perspectives*, 12(2), 63-90.
- Dasgupta, P. (2005). Economics of social capital. *Economic Record*, 81, S2-S21.
- Davis, J. B. (1995). Personal identity and standard economic theory. *Journal of Economic Methodology*, 2(1), 35-52.
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- Davis, J. B. (2007). Akerlof and Kranton on identity in economics: inverting the analysis. *Cambridge Journal of Economics*, 31(3), 349-362.
- Davis, J. B. (2011). Identity Economics: How Our Identities Shape Our Work, Wages, and Well-Being, George A. Akerlof and Rachel E. Kranton, Princeton University Press, vi+ 185 pp. *Economics & Philosophy*, 27(3), 331-338.



- Davis, J. B. (2019). Stratification economics as an economics of exclusion. *Journal of Economics, Race, and Policy*, 2(3), 163-172.
- Dickinson, D. L., & Oaxaca, R. L. (2009). Statistical discrimination in labor markets: An experimental analysis. *Southern Economic Journal*, 76(1), 16-31.
- Folbre, N. (2018). The care penalty and gender inequality. In: *The Oxford handbook of women and the economy*, (eds.) Susan L. Averett, Laura M. Argys, and Saul D. Hoffman DOI: 10.1093/oxfordhb/9780190628963.013.24, 749-766.
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- Joan, M. A. (1995). Distributional issues in ecological economics. *Review of Social Economy*, 53(4), 511-528.
- Davis, J. B. (2022). A general theory of social economic stratification: stigmatization, exclusion, and capability shortfalls. *Review of Evolutionary Political Economy*, 1-21.
- Eckel, C. C., Fatas, E., & Wilson, R. (2010). Cooperation and status in organizations. *Journal of Public Economic Theory*, 12(4), 737-762.
- Glaeser, E. L. (2005). The political economy of hatred. *The Quarterly Journal of Economics*, 120(1), 45-86.
- Gusciute, E., Mühlau, P., & Layte, R. (2022). Discrimination in the rental housing market: a field experiment in Ireland. *Journal of Ethnic and Migration Studies*, 48(3), 613-634.
- Hofmeyr, A., & Burns, J. (2012). Two sides of the same coin: Re-examining nepotism and discrimination in a segmented society. *Review of Social Economy*, 70(3), 344-374.
- Jayachandran, S. (2021). Social norms as a barrier to women's employment in developing countries. *IMF Economic Review*, 69(3), 576-595.
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- Mukherjee, P., Ray, B., & Bhattacharya, R. N. (2017). Status differences in collective action and forest benefits: evidence from joint forest management in India. *Environment, Development and Sustainability*, 19(5), 1831-1854.
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- Ray, B., Mukherjee, P., & Bhattacharya, R. N. (2017). Gender Differences in Social Capital and Collective Action: Does Social Identity Matter in Joint Forest Management? In: P. Mukhopadhyay, N. Nawn and K. Das (Eds.) *Global Change, Ecosystems, Sustainability: Theory, Methods, Practice*, (pp. 225-244). Sage.
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- Sharma, S. (2015). Caste-based crimes and economic status: Evidence from India. *Journal of comparative economics*, 43(1), 204-226.
- Shayo, M. (2009). A model of social identity with an application to political economy: Nation, class, and redistribution. *American Political science review*, 103(2), 147-174.
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- Spash, C. L. (2011). Social ecological economics: Understanding the past to see the future. *American Journal of Economics and Sociology*, 70(2), 340-375.
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Discipline Specific Elective Course (DSE 18): Advanced Econometrics II

Paper XIX (1)

Course Credit – 4 (theory (2) + Practical (2))

Total Lecture Hours: 54

Full Marks 50

Group A: Theory (30 marks)

1. Review of static panel model [Lecture hours 2]
2. Non-stationary panel model
 - Panel unit root test
 - First generation model
 - Second generation model
 - Panel cointegration
 - Panel VAR [Lecture hours 8]
3. Dynamic panel data model
 - Endogeneity in dynamic model
 - Instrumental variable estimation
 - GMM estimation
 - System GMM estimation [Lecture hours 5]
4. Spatial econometrics
 - Introduction to spatial econometrics
 - Spatial models
 - Maximum likelihood estimation
 - IV and GMM estimators [Lecture hours 10]
8. Special topics (selected)
 - Quantile regression
 - Ordinal logit model
 - Multinomial logit model
 - Threshold regression model
 - Application of Econometric Models in Machine Learning [Lecture hours 10]

Group B: Practical (20 marks)

[Lab class hours 20]

Application of advanced econometric methods in empirical study on specific problems based on microeconomics, macroeconomics, finance and growth theories with cross section and panel data



References

- Anselin, L. (1995). Local Indicators of Spatial Association- LISA. *Geographical analysis*, 27(2), 93-115.
- Baltagi, Badi H (2021), *Econometric Analysis of Panel Data*, Springer, 6th Edition.
- C. Hsiao (2003): *Analysis of Panel Data*, 2nd ed., Cambridge University Press
- Celebioglu, F., & Dall'Erba, S. (2010). Spatial Disparities Across the Regions of Turkey: An Exploratory Spatial Data Analysis. *The Annals of Regional Science*, 45(2), 379-400.
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Discipline Specific Elective Course (DSE 20): Operations Research-II

Paper XIX (2)

Course Credit – 4 (Theory 2 + Practical 2)

Total Lecture Hours: 50

Full Marks 50

Group A: 25 marks

1. Project Evaluation Review and Technique under certainty and uncertainty [5 lectures]
2. Decision Analysis: Decision making under different environment, Methods of Decision making under uncertainty, Bayesian Decision Analysis, Analytical Hierarchy Process [10 lectures]
3. Markov Chains: Stochastic Processes, Long Run Properties of Markov Chains, Continuous Time Markov Chains [2 lectures]
4. Queuing Theory: Queuing Systems, Probability Distributions, Queuing Process [2 lectures]
5. Inventory Theory: Probabilistic Models [2 lectures]
6. Simulation: Monte Carlo Method, Pseudo-Random Numbers and its application to economic problems [4 lectures]

Group B: 25 marks

Practical Applications of the Topics 1-6 in Group A based on Excel and R [25 lectures]

References:

1. Hillier, F and Liberman, G(2006): Operations Research, McGraw Hill, India
2. Rardin, R (1998): Optimization in Operations Research, Pearson Publication, India



Discipline Specific Elective Course (DSE 22): Money and Finance II

Paper XIX (3)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

Group A- Monetary Economics (25 marks)

- **Stock market and macroeconomics:** Analysis of Tobin's q , investment, effective demand
- **Bank credit and macroeconomics:** Issues relating to credit rationing and effective supply failure, credit view, money view and effective demand
- **Exchange rate dynamics and current account**
- **Financial crisis:** Alternative approaches, capital account liberalization and financial crisis in emerging market economies

Group B- Financial Economics (25 marks)

- **The foreign exchange market:** Participants, characteristics and operations
- **The spot market:** Organisation of interbank spot market, concepts of direct, indirect and cross rates, bid-ask spread, triangular arbitrage
- **Foreign exchange exposure and risk management**
- **Introduction to currency derivative:** Forward, futures and options market operations
- **Multinational corporations:** Origin, growth and operations

References:

1. Walsh, C: *Monetary Theory and Policy*, Indian Reprint, PHI Learning
2. Woodford, M: *Interest and Prices – Foundations of a Theory of Monetary Policy*, Indian Reprint, New Age International Publishers
3. Blanchard, O. and Fisher, S: *Lectures on Macroeconomics*, Indian Reprint, PHI Learning
4. Tirole, J: *The Theory of Corporate Finance*, MIT Press
5. Brearley R.A., Myers S.C., Allen F. and Mohanty P: *Principles of Corporate Finance*, McGraw Hill
6. Damodaran, A: *Corporate Finance: Theory and Practice*, Wiley
7. Levi, M: *International Finance*, Routledge
8. Shapiro, A: *Multinational Financial Management*, John Wiley and Sons
9. Sharpe W., Alexander G. and Bailey, J: *Investments*, Prentice Hall
10. Bhole, L. and Mahakud, J: *Financial Institutions and Markets: Structure, Growth and Innovations*, Tata McGraw Hills



Discipline Specific Elective Course (DSE 24): Economics of Institutions II

Paper XIX (4)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Norms and institutions – role of culture – evolution of norms and institutions.
2. Role of networks in economic decision making – few studies from developing countries – Micro finance, ROSCA, labour market networks etc.

References:

Dixit, A (2007): *Lawlessness and Economics: Alternative Mode of Governance*. Princeton University Press

Greif, A (2006): *Institutions and the Path to the Modern Economy: Lessons from Medieval Trade*. Cambridge University Press.

North, D (1990): *Institutions, Institutional Change and Economic Performance*, Cambridge University Press.

Ostrom, E (1990): *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press

**Besides the references listed above several journal articles will also be used.



Discipline Specific Elective Course (DSE 26): Political Economy of Development II

Paper XIX (5)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

Development as hegemonic: Structure of development from a class perspective; third world and the question of outside (8 hours)

Class critique of Political Economy of Development: class-focused economy beyond capitalocentrism-orientalism; re-examining dual economic models (Lewis, informal-formal, etc.); capitalist induced transition, rural-urban migration, working class and surplus population; rethinking transition: reconstruction; post-capitalism and post-development (10 hours)

Dislocation and displacement: Capitalist led development, capital accumulation and primitive accumulation; primitive accumulation under colonialism, imperialism and globalization; accumulation by dispossession; critique of primitive accumulation. (10 hours)

Bio-political and management of third world: social need, compensation, resettlement and management of dislocation; role of nation state, international agencies and NGOs; capitalist led development and India's public distribution system (10 hours)

Approaches to poverty: Mainstream, Post-development, Capability and Class-focused. (8 hours)

State in development: objectives, strategies, apparatus and technologies of state; Indian economic transition and state. (6 hours)

References

- Anthony B. Atkinson. 2019. *Measuring Poverty* around the World, Princeton University Press.
- Chakrabarti, A and Dhar, A. 2009. *Dislocation and Resettlement in Development: From Third World to World of the Third*. Routledge.
- Escobar, A. 1995. *Encountering development: the making and unmaking of the third world*. Princeton University Press.
- Gibson-Graham J. K, J Cameron, and S Healy. 2013. *Take Back the Economy. An Ethical Guide for Transforming Our Communities*. University of Minnesota Press.
- Ha-Joon Chang. 2002. *Kicking Away the Ladder: Development Strategy in Historical Perspective*, Anthem.
- Kothari, Ashish, Ariel Salleh, Arturo Escobar, Federico Demaria, and Alberto Acosta, 2019. *Pluriverse: A Post-Development Dictionary*, New Delhi, India, Tulika Books.
- Marx, K. *Capital: A Critique of Political Economy. Volumes 1, 2 and 3*. Progress Publishers or Penguin Classic.
- Rahnema, M. and V Bawtree. 1997. *The Post-Development Reader*. Zed Books Ltd.
- Resnick, S. and R. Wolff. 2012. *Contending Economic Theories*. MIT Press.
- Ruccio, D. 2011. *Development and Globalization: A Marxian Class Analysis*. Routledge.
- Saito, K. 2018. *Karl Marx's Ecosocialism: Capital, Nature, and the Unfinished Critique of Political Economy*. Monthly Review Press.
- Sen, A, K. 2009. *The Idea of Justice*, Penguin.
- Shanin, T. 1983. *Late Marx and the Russian Road: Marx and the Peripheries of Capitalism*, Routledge



Discipline Specific Elective Course (DSE 28): Development Management II

Paper XIX (6)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

I. Social Sector and Opportunities

Characteristics, functions and problems of equity and opportunities in

- Education Sector
- Health care
- Gender equality

II. Characteristics & Distortions in Financial Institutions

- Access to capital
- Banks and non-banking financial Institutions
- Cooperatives & Micro credits

Readings:

- Bardhan, Pranab and Christopher Udry (1999): Development Microeconomics, OUP
- Ray, Debraj, (1998): Development Economics, OUP
- Sen, Amartya, (2000): Development as Freedom, OUP
- Stiglitz, Joseph, (2002): Globalization and its Discontents.
- Dreze, Jean and Amartya Sen, (1989): Hunger and Public Action
- Dreze, Jean and Amartya Sen (1995): India: Economic Development and Social Opportunities.
- Sen, Amartya, (1985): Commodities and Capabilities.
- Sen, Amartya, (2001): Many Faces of Gender Inequality.
- Banerjee & Duflo (2012): Poor Economics
- Srivastava Aseem & Ashish Kothari (2012): Churning the Earth: The Making of Global India. Penguin



Discipline Specific Elective Course (DSE 30): Experimental Economics II

Paper XIX (7)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Behavioural economic theories and experiments in economics [Lecture hours 18]

- (a) Introduction to behavioural economics and the relationship between experimental and behavioural economics
 - (b) Concept of bounded rationality
 - (c) Heuristics & biases
 - (d) Inter-temporal decision making: exponential & hyperbolic discounting
 - (e) Prospect theory
- Applications of behavioural theories in different fields (game theory, finance, industrial organization and so on)

2. Non-standard experiments [Lecture hours 6]

- a) Common pool resource experiment
- b) Gift Exchange
- c) Competition
- d) Self-serving bias and self-signalling

3. Social issues in economic experiments [Lecture hours 12]

- a) Incorporating social preferences in economic models,
- b) Gender and social preferences
- c) Experimental economics of religion
- d) Discrimination
- e) Leadership, punishment and cooperation
- f) Social identity theory
- g) Expectation states theory

4. Randomization, impact evaluation and the problem of causal inference [Lecture hours 10]

experimental and non-experimental methods of causal inference-RCT in a research design-conceptual and practical issues of design-perfect and quasi-perfect randomization-external validity and generalization.

5. Other relevant topics in behavioural economics [Lecture hours 4]

References

- Davis, D. D., & Holt, C. A. (2021). *Experimental economics*. Princeton University Press.
- Gupta, G. (2015). *An Introduction to Experimental Economics*, Orient Blackswan
- Bardsley, N., Cubitt, R., Loomes, G., Moffatt, P., Starmer, C. & Sugden, R. (2010) *Experimental economics: Rethinking the rules*. Princeton University Press.
- Plott, C. R., & Smith, V. L. (Eds.). (2008). *Handbook of experimental economics results* (Vol. 1). Elsevier.
- Kagel, J. H., & Roth, A. E. (Eds.). (2020). *The handbook of experimental economics, volume 2*. Princeton University Press.
- Friedman, S., Friedman, D., & Sunder, S. (1994). *Experimental methods: A primer for economists*. Cambridge University Press.
- Pablo Branas-Garza, Antonio Cabrales (2015) - *Experimental Economics, Volume I, Economic Decisions*-Palgrave Macmillan
- Brañas-Garza, P., & Cabrales, A. (Eds.). (2016). *Experimental Economics: Volume II: Economic Applications*. Springer.
- Weimann, J., & Brosig-Koch, J. (2019). *Methods in experimental economics*. Springer International Publishing.
- Durlauf, S., & Blume, L. (Eds.). (2016). *Behavioural and experimental economics*. Springer.
- Charness, G., & Pingle, M. (Eds.). (2022). *The Art of Experimental Economics: Twenty Top Papers Reviewed*. Routledge.
- Jacquemet, N., & l'Haridon, O. (2018). *Experimental Economics: Method and applications*. Cambridge University Press.
- N.B. Other references such as articles published in different journals will be referred to and provided with during the class lecture hours.



Discipline Specific Elective Course (DSE 32): Economics of Innovation II

Paper XIX (8)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Institutions and agents:

Intellectual Property Rights; Patents, Copy rights, Licensing
R&D organizations and Universities

2. Effects of Innovation:

Measuring economic effects of Innovations
Innovations and labour market
Social innovations

3. Policy making in STI

Microeconomic policies to promote Firm-level innovations
R&D in global economy
International migration of skilled labour
Management of innovation

References:

Greenhalgh, Christine and Mark Rogers (eds) (2010) Innovation, Intellectual Property and Economic Growth, Princeton University Press.
Fagerberg, Jan, David C. Mowery and Richard R. Nelson (eds.) (2005) The Oxford Handbook of Innovation, Oxford University Press.
Hall, Bronwyn H. and Nathan Rosenberg (eds) (2010) Handbook of the Economics of Innovation, Elsevier.



Discipline Specific Elective Course (DSE 34): Labour Economics II

Paper XX (1)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Self-selection in the Labour Market [6 lectures]
2. Asymmetric Information, Screening and Occupational Choice [7 lectures]
3. General vs. Specific Training in the Labour Market [6 lectures]
4. Economic Restructuring and Labor Market: Policies, Compensations Schemes and Insurance [6 lectures]
5. Economics of Child Labour- Introduction, Child Labour Theory, Models based on Altruistic Behaviour, Models based on selfish behaviour, Poverty Hypothesis of Child Labour, Child Labour and Social Stigma, Globalisation and Child Labour [25 lectures]

References:

1. Gary Becker, David Autor, Lecture Notes and chapters from CZ
2. Basu, K. (1999). 'Child labour: cause, consequence, and cure, with remarks on international labour standards', *Journal of Economic Literature*, vol. 37 (September), 1083-1119.
3. Basu, K. and Van, P.H. (1998). 'The economics of child labour', *American Economic Review*, vol. 88(3), 412-427.
4. Basu, K., Das, S. and Dutta, B. (2010). 'Child labor and household wealth: Theory and empirical evidence of an inverted-U' *Journal of Development Economics*, vol. 91(1), 8-14
5. Chaudhuri, S. and Dwibedi, J. (2016). 'Foreign Direct Investment and Domestic Child Labor' *Review of Development Economics*, vol. 21(2), 383-403
6. Cigno, A., Rosati, F.C. and Guarcello, L. (2002). 'Does globalization increase child labor?', *World Development*, vol. 30(9), 1579-1589.
7. Dwibedi, J. and Chaudhuri, S. (2010). 'Foreign capital, return to education and child labour' *International Review of Economics and Finance*, vol. 19, 278-286
8. Dwibedi, J. and Marjit, S. (2017). 'Relative Affluence and Child Labor—Explaining a Paradox', *Review of Development Economics*, vol. 21(4), 1178-1190.
9. Gupta, M.R. (2000). 'Wage determination of a child worker: A theoretical analysis', *Review of Development Economics*, vol. 4(2), 219-228.
10. Luis Felipe López Calva, 2002. "A social stigma model of child labor," *Estudios Económicos*, El Colegio de México, Centro de Estudios Económicos, vol. 17(2), pages 193-217.



Discipline Specific Elective Course (DSE 36): Economics of Agriculture II

Paper XX (2)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

Group – A: Some Theoretical Debates on the Agrarian Economy with Special Reference to India (Any three of the following topics may be discussed in a semester)

1.Economic Transformation and the Rural Non-farm Sector: Theoretical Perspectives

References

Nurul Islam (1997), *The Nonfarm Sector and Rural Development*, Food, Agriculture and the Environment Discussion Paper # 22, IFPRI, Washington, D.C.

Frank Ellis (2000), *Rural Livelihoods and Diversity in Developing Countries*, CUP, Cambridge. S Haggblade, P Hazell and T Reardon (eds.) (2007), *Transforming the Rural Nonfarm Economy:*

Opportunities and Threats in the Developing World, OUP, New Delhi.

2.Farm-Nonfarm Linkages

Steven Haggblade et al. (1989), “Farm-Nonfarm Linkages in Rural Sub-Saharan Africa”, *World Development*, Vol. 17, No. 8.

Haggblade, Steven, Jeffrey Hammer and Peter Hazell (1991), “Modeling Agricultural Growth Multipliers”, *American Journal of Agricultural Economics*, Vol. 73, No. 2, May.

Benjamin Devis et al. (2002), *Promoting Farm/Non-farm Linkages for Rural Development*, Food & Agriculture Organisation, Rome, Chapters 1 and 2.

3.Agricultural Diversification

References

P K Joshi et al. (2004), “Agriculture Diversification in South Asia: Patterns, Determinants and Policy Implication”, *Economic & Political Weekly*, June 12.

V S Vyas (1996), “Diversification of Agriculture: Concept, Rationale and Approaches”, *Indian Journal of Agricultural Economics*, Vol. 51, No. 4.

4 . Economics of Farm Size.

References

Keijiro Otsuka (2007), “Efficiency and Equity Effects of Land Markets” in E Evenson and P Pingali (eds.), *Handbook of Agricultural Economics*, Vol. III, Ch. 9.

Robert Eastwood, Michael Lipton and Andrew Newell (2010), “Farm Size”, in E Evenson and P Pingali (eds.), *Handbook of Agricultural Economics*, Volume IV, Ch. 65.

5.Future of Small Farms.

Reference

Articles published in *World Development*, Volume 38, Issue 10, October 2010

6.Market–Assisted Land Reforms.



References

Klaus Deininger & Hans Binswanger (2002), "The Evolution of the World Bank's Land Policy:

Principles, Experience and Future Challenges", *The World Bank Research Observer*, Vol.14, No.2.

Klaus Deininger (2003), *Land Policies for Growth and Poverty Reduction*, The World Bank, Washington D.C. [Available at www.worldbank.org].

7.Redistributive Land Reforms: Review of Recent Debates

References

Keith Griffin et al. (2002), "Poverty and Distribution of Land", *Journal of Agrarian Change*, Vol. 2, No.3.

Articles published in *Journal of Agrarian Change*, Vol. 4, Nos. 1-2, 2004.

Keith Griffin et al. (2004), "In Defence of Neo-Classical Neo-Populism", *Journal of Agrarian Change*, Vol. 4, No.3.

Group – B: Current Debates on Indian Agriculture (25 marks, 20 hours)

1. Globalisation of Indian Agriculture: Emerging Issues

[The issues that may be specifically discussed are effect of India's signing of Agreement on Agriculture (AoA), WTO negotiations, trade liberalization, trade in agricultural commodities, agricultural subsidy, and so on]

References

Ashok Gulati and Tim Kelly (1999), *Trade Liberalisation and Indian Agriculture*, Oxford University Press, New Delhi, Ch. 5.

Ashok Gulati and Sudha Narayan (2003), *The Subsidy Syndrome in Indian Agriculture*, Oxford - University Press, New Delhi.

Anwarul Hoda and Ashok Gulati (2008), *WTO Negotiations on Agriculture and Developing Countries*, Oxford University Press, New Delhi.

Debashis Chakraborty and Amir Ullah Khan (2008), *The WTO Deadlocked: Understanding the Dynamics of International Trade*, Sage Publications, New Delhi, Chs. 1, 2 and 11.

2. Performance of Indian Agriculture in the Era of Globalisation

[The issues that may be specifically discussed are growth and regional disparity, capital formation, subsidy, technology adoption, returns from agriculture, indebtedness, agrarian crisis, and so on]

References

Bhalla, G S and Gurmail Singh (2012), *Economic Liberalisation and Indian Agriculture: A District Level Study*, Sage Publications, New Delhi.

Bhaumik, S. K. (ed.) (2008), *Reforming Indian Agriculture: Towards Employment Generation and Poverty Reduction*, Sage Publications, New Delhi, Introduction and Chapters 1-3.

Mahendra Dev, S (2008), *Inclusive Growth in India*, Oxford University Press, New Delhi, Chs. 2 & 3.

Reddy, D Narasimha and Srijit Mishra (eds.) (2009), *Agrarian Crisis in India*, Oxford University Press, New Delhi, Chapters 1 and 5.



Discipline Specific Elective Course (DSE 38): Urban Planning II

Paper XX (3)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Urban Transport
2. Impact Assessment: Concepts and Techniques
3. Financial Planning for Urban Local Bodies: Budget ,Resources ,Institutions
4. Urban Planning in India –Study of Selected Plan Documents and Policy Papers
5. Urban Land
6. Slums and Informal Sector
7. Urban Finance-74th Amendment, State Financial Commission
8. Urban Infrastructure Pricing
9. Urban Heritage- Meaning and Types,Role and Importance of Heritage in Urban Development, Issues and Challenges of preservation and Conservation of Urban Heritage
10. Urban open space-concept and meaning, importance of open space to urban area, open space for sustainability, factors responsible for deterioration of open spaces, renewal and revitalization of urban open spaces, aspects for revitalization of open spaces

11.. Planning Process in India- Smart City

References:

- Dimitrou, T.H.,(ed) (2013),Transport Planning for Third World Cities, Routledge Revivals, March;
- Button,K.J.,TransportEconomics,EdwardElgarPublishingCompany,March,2013
- Gupta, S, Passenger Transport Subsidy in West Bengal: Use and Misuse, Manak Publications Private limited, NewDelhi,2007
- Levy,ContemporaryUrbanPlanning,,PrenticeHall:NewYork,March,2012
- Reports of WBPCB,CPCB
- StateofEnvironmentalReport,2009,Delhi
- CitiesAlliance,(2007),Washington,(<http://www.citiesalliance.org/index.html>)
- RodneyRWhite,(1998),UrbanEnvironmentalManagement,JohnWiley:NewYork
- C J Barrow, (1996), Environment and Social Impact Assessment -An introduction, Arnold: New York
- Documents related to Urban Planning and Policy of Government of India and different Urban Development Authorities



Discipline Specific Elective Course (DSE 40): Health Economics II

Paper XX (4)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

Health Care market and Demand for health care

- Health care as an input in health: Health production function
- Demand for 'illness'
- Notion of need
- Supplier Induced demand
- Ex-ante and Ex-post Moral Hazard

Providers of health care

- Hospitals (efficiency, costs, utility function)
- Physician (firm, entrepreneur, labourer or diagnostician?)
- Insurance Market (demand and supply of insurance market; universal insurance)
- Pharmaceutical Industry (market concentration, patent, TRIPS, Indian Industry)
- Alternative Medicine (Demand and supply)

Quality of Health Care

- Measurement of quality of care

Issues related to Health Care Reform and Policy [14]

- Experiences of health care reform
- Changes in Health Care Finance
- Public and private finance and provision; Public Private Partnership
- Impact of reform

References:

1. Cuyler A and J Newhouse (ed) (2000), *Handbook of Health Economics*. Elsevier.
2. Phelps Charles, *Health Economics* (2018). Routle
3. Santerre R and S Neun (2007), *Health Economics: Theories, Insights and Industry Studies*. Thompson.
4. Zweifel P (1997), *Health Economics*.



Discipline Specific Elective Course (DSE 42): Resource & Environmental Economics II

Paper XX (5)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Common Property Resources

[6 lecture hours]

- Community Management of Common Property Resources;
- Coordination Failure- Increasing Returns, Free-riding Problem (Assurance Game and Prisoner's Dilemma)
- Community Institutions: Case Studies

References

- (i) Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge university press.
- (ii) Ostrom, E., Gardner, R., Walker, J., Walker, J. M., & Walker, J. (1994). *Rules, games, and common-pool resources*. University of Michigan Press.
- (iii) Ray, B., & Bhattacharya, R. N. (2011). Transaction costs, collective action and survival of heterogeneous co-management institutions: case study of forest management organisations in West Bengal, India. *The Journal of Development Studies*, 47(2), 253-273.
- (iv) Agrawal, A. (2003). Sustainable governance of common-pool resources: context, methods, and politics. *Annual review of anthropology*, 32(1), 243-262.
- (v) Tietenberg, T., & Lewis, L. (2018). *Environmental and natural resource economics*. Routledge.
- (vi) Anderson, D. A. (2010). *Environmental economics and natural resource management*. Routledge.
- (vii) Adhikari, B. Di Falco, S. and Lovett, J.C. (2004) : 'Household Characteristics and Forest Dependency : Evidence from Common Property Forest Management in Nepal', *Ecological Economics*, 48(2): 245-257.
- (viii) Adhikari, B. (2021) : 'The Economics of Common Pool Resources : A Review', *Ecology, Economy and Society-the INSEE Journal*, 4(1): 71-88.
- (ix) Stern, P. (2011) : 'Design Principles for Global Commons: Natural Resources and Emerging Technologies', *International Journal of Commons*, 5(2): 213-232.
- (x) Agrawal, A. (2002): 'Common Resources and Institutional Sustainability' in Ostrom, E., Dietz, T., Dolsak, N. Stern P.C., Stonich, S., and Weber, E.U. (eds), *The Drama of Commons*, National Academy Press, : 41-85.

2. Poverty, Natural Resource Management and Economic Development

[8 lecture hours]

- Poverty and Environment : Two way causality
- Poverty and Natural Resource Management
- Environmental Kuznets Curve and its implications

References

- (i) Maler, K. G., & Vincent, J. R. (Eds.). (2003). *Handbook of Environmental Economics: Environmental Degradation and Institutional Responses*. Elsevier.
- (ii) Schleicher, J., Schaafsma, M., Burgess, N. D., Sandbrook, C., Danks, F., Cowie, C., & Vira, B. (2018). Poorer without it? The neglected role of the natural environment in poverty and wellbeing. *Sustainable Development*, 26(1), 83-98.
- (iii) Dinda, S. (2004). Environmental Kuznets curve hypothesis: a survey. *Ecological economics*, 49(4), 431-455.
- (iv) Anderson, D. A. (2010). *Environmental economics and natural resource management*. Routledge.
- (v) Stern, D. I. (2017). The environmental Kuznets curve after 25 years. *Journal of Bioeconomics*, 19(1), 7-28.
- (vi)



3. Economics of Natural Disaster

[8 lecture hours]

- Definition of natural disaster
- Economic impacts of natural disasters on gender relations and economic growth-its impacts on gender gaps and life expectancy
- Methodological approaches and challenges to assessing the environmental losses from a natural disaster
- Exposure to a natural disaster: global and regional measurement; case studies in India; preventing and recovering from natural disasters.

References

- (i) Ray-Bennett, N. S. (2007). Environmental disasters and disastrous policies: An overview from India. *Social Policy & Administration*, 41(4), 419-424.
- (ii) Kim, N. (2012). How much more exposed are the poor to natural disasters? Global and regional measurement. *Disasters*, 36(2), 195-211.
- (iii) Sam, A. S., Kumar, R., Kächele, H., & Müller, K. (2017). Vulnerabilities to flood hazards among rural households in India. *Natural hazards*, 88(2), 1133-1153.
- (iv) Neumayer, E., & Plümper, T. (2007). The gendered nature of natural disasters: The impact of catastrophic events on the gender gap in life expectancy, 1981–2002. *Annals of the association of American Geographers*, 97(3), 551-566.
- (v) Sangha, K. K., Russell-Smith, J., Evans, J., & Edwards, A. (2020). Methodological approaches and challenges to assess the environmental losses from natural disasters. *International Journal of Disaster Risk Reduction*, 49, 101619.
- (vi) Panwar, V., & Sen, S. (2019). Economic impact of natural disasters: An empirical re-examination. *Margin: The Journal of Applied Economic Research*, 13(1), 109-139.
- (vii) Tselios, V., & Tompkins, E. L. (2020). Can we prevent disasters using socioeconomic and political policy tools?. *International Journal of Disaster Risk Reduction*, 51, 101764.
- (viii) Xu, J., Wang, Z., Shen, F., Ouyang, C., & Tu, Y. (2016). Natural disasters and social conflict: A systematic literature review. *International journal of disaster risk reduction*, 17, 38-48.
- (ix) Llorente-Marrón, M., Díaz-Fernández, M., Moreno, S. D., & Méndez-Rodríguez, P. (2020). Socioeconomic consequences of natural disasters on gender relations: The case of Haiti. *International Journal of Disaster Risk Reduction*, 50, 101693.
- (x) Fanchiotti, M., Dash, J., Tompkins, E. L., & Hutton, C. W. (2020). The 1999 super cyclone in Odisha, India: A systematic review of documented losses. *International Journal of Disaster Risk Reduction*, 51, 101790.
- (xi) Joseph, J. (2013). Measuring vulnerability to natural hazards: a macro framework. *Disasters*, 37(2), 185-200.
- (xii) Tselios, V., & Tompkins, E. L. (2019). What causes nations to recover from disasters? An inquiry into the role of wealth, income inequality, and social welfare provisioning. *International journal of disaster risk reduction*, 33, 162-180.

4. Trade and Environment and the Economics of Climate Change

[8 lecture hours]

- Unfair trade and ecological dumping
- The Taxonomy of Environmental Pollution in the Presence of International Trade
- Migration of dirty industries: displacement hypothesis and pollution haven hypothesis
- International Trade and Environmental Damage : Production Pollution-Scale, Composition and Technique Effects, Consumption Pollution : general equilibrium approach
- Tradeoff between gains from trade and environmental degradation : partial equilibrium approach
- The Economics of Climate Change : Green Paradox, Carbon taxes and global warming
- Unintended consequences of climate policy
- Supply-side view of climate problem-green paradox in open economies: static and dynamic models-green paradox and exhaustible resources



References

- (i) Acharyya, R. “*Trade and Environment*”, Chapters 1 and 2. Oxford India Short Introductions.
- (ii) Frankel, J. ‘*Trade , Growth and the Environment*’, Harvard Kennedy School Lecture, Harvard University, USA, 2020
- (iii) Jensen, S., Mohlin, K., Pittel, K., & Sterner, T. (2020). An introduction to the green paradox: the unintended consequences of climate policies. *Review of Environmental Economics and Policy*.

5. Learning, Bayesian Updating and Irreversible Development [4 lecture hours]

- Learning, Bayesian Updating and Search
- Irreversible Development

Reference

Conrad, J.M. and Clark, C.W. : *Natural Resource Economics-Notes and Problems*, CUP

6. Environmental Accounting and Sustainable Development [7 lecture hours]

- Environmental Accounting: Difference between Net Domestic Product (NDP) and Environmentally Adjusted Domestic Product (EDP) in the presence of Non Renewable and Renewable Resources. Different interpretations of rent from resource extraction.
- Relation between EDP and Wealth
- Sustainable Development : Meaning and Rules
- Hawtrick’s Rule
- Pearce–Atkinson Measure and Modified Pearce–Atkinson Measure of Sustainable Development

Reference

- (i) Perman, R., Ma, Y., McGilvary, J. and Common, M. : *Natural Resource and Environmental Economics*, 2nd edition, Prentice Hall.
- (ii) Maler, K. G., & Vincent, J. R. (Eds.). (2003). *Handbook of Environmental Economics: Environmental Degradation and Institutional Responses*. Elsevier.
- (iii) Hanley, N., Shogren, J., & White, B. (2019). *Introduction to environmental economics*. Oxford University Press.

7. Environmental Valuation and Cost-benefit Analysis [9 lecture hours]

- Total Economic Value of the Environment
- Revealed preference Approach: - Household Production Function - Travel Cost - Hedonic Price Theory - Statistical Value of Life; •
- Stated Preference Approach: - Hypothetical Market and Contingent Valuation Method (CVM)-Bidding Game-Random Utility Model-Econometric Applications of CVM-Case Studies
- Basic ideas of Choice Experiment Method of valuation and its applications

References

- (i) Hanley N, Shogren J.F. and White B. *Environmental Economics in Theory and Practice*, Macmillan.
- (ii) Kolstad C, *Environmental Economics*, OUP
- (iii) Banerjee, S. : ‘ Economic Valuation of Environmental Benefits and Costs’ in in R.N. Bhattacharya (ed) *Environmental Economics-An Indian Perspective*, OUP
- (iv) Hanemann, W. M. , ‘Contingent Valuation in Economics’ in Sankar, U. (ed), *Environmental Economics*, OUP.
- (v) Hadker, N., Sharma, S., Asish, D. and Muraleedharan, T. ‘Willingness to Pay for Borivili National Park: Evidence from a Contingent Valuation’, *Ecological Economics*, 1997, 21: 105-122.
- (vi) Cherry, T. L., Kroll, S., & Shogren, J. (2007). *Environmental economics, experimental methods*. Routledge



Discipline Specific Elective Course (DSE 44): Marxian Economics II

Paper XX (6)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

Capital: Value, Surplus Value and Distribution: commodity, value, value form, money and price; Labor power, Labor process, Surplus labor and Class process; Capitalist Class Process: constant capital, variable capital, surplus value, capital and capital accumulation; surplus value and profit; Productive and unproductive capitalists, Productive and unproductive laborers; Absolute and relative surplus value; Distribution: Revenue, Income and Class Inequality; value rate of profit: rate of exploitation, organic composition of capital and surplus value distribution; critique of trinity formula (16 hours)

Theory of Class Enterprise: Class enterprise and its forms: Independent, Capitalist, Feudal, Slave, Communist and Community enterprise; Class enterprise: centered versus decentered; Capitalist Enterprise: private and state; global and national; rate of capital accumulation and complex rate of profit; supply chain and value transfer (12 hours)

Primitive Accumulation: Formation of commodity of labor power: expropriation of means of production and means of subsistence; Capitalism and Dispossession; Late Marx, historical inevitability and revisiting the transition debate (8 hours)

Some debates in Marxian Theory: The so-called transformation problem; Falling rate of profit and capitalist business cycle; Social surplus, need and public policy (8 hours)

Limits of Capitalism: Exploitation, Inequality and Democracy; Reserve army of labor, unemployment and surplus population; Capitalism and Ecology: From Anthropocene to Metabolic Rift (6 hours)

References

1. Burczak, Ted, Rob Garnett, and Ric McIntyre (ed.). 2017. *Marxism without Guarantees: Economics, Knowledge, and Class*. Routledge.
2. [Brennan](#), David, M, [David Kristjanson-Gural](#), [Catherine P. Mulder](#), [Erik K. Olsen](#) (ed.). 2017. *Routledge Handbook of Marxian Economics*. Routledge.
3. Marx, K. 1976. *Grundrisse: Foundations of the Critique of Political Economy*. Penguin Classic.
4. Marx, K. *Capital: A Critique of Political Economy. Volumes 1, 2 and 3*. Progress Publishers or Penguin Classic.
5. Foley, D, 1986. *Understanding "Capital": Marx's Economic Theory*. Harvard University Press.
6. Harvey, D. 2010. *A Companion to Marx's Capital*. Verso.
7. Howard, M and King, J. 1989. *A History of Marxian Economics 1883-1929. Vol1*. Princeton University Press.
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9. Resnick, S. A. and Wolff, R. D. 1987. *Knowledge and Class: A Marxist Critique of Political Economy*. University of Chicago Press.
10. Resnick, S and R, Wolff. 2002. *Class theory and History: Capitalism and communism in the U.S.S.R.* Routledge.
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12. Saito, K. 2018. *Karl Marx's Ecosocialism: Capital, Nature, and the Unfinished Critique of Political Economy*. Monthly Review Press.
13. Saad-Filho, A and Ben Fine. 2010. *Marx's Capital*, Fifth Edition, Pluto Press.
14. Shanin, T. 1983. *Late Marx and the Russian Road: Marx and the Peripheries of Capitalism*, Routledge.
15. Sweezy, P. 2016 (reprint). *The Theory of Capitalist Development: Principles of Marxist Political Economy*. Aakar Books: New Delhi.



Discipline Specific Elective Course (DSE 46): Gender Economics II

Paper XX (7)

Course Credit – 4

Total Lecture Hours: 50

Full Marks 50

1. Gender and Development Policy-WID, GAD, Beijing process [6 lectures]
2. Gender and Neoliberalism-Critique and impact [6 lectures]
3. Gender and Demography-Population Dynamics, Health, Fertility, Maternal health, Menstrual health, Sex ratio, Son preference [8 lectures]
4. Gender and environment -Ecofeminism, Feminist Environmentalism, etc. [5 lectures]
5. Women and Education -Discrimination, Glass ceiling, Neo discrimination, Skill and Development and participation of women. [5 lectures]
6. Gender and economics of developing world- Development practices in Asia, Africa and Latin America, self-help groups and women entrepreneurs [10 lectures]
7. Gender and Poverty- Poverty and gender inequality, Economic inequality and women [2 lectures]
8. Visibility of women in data and statistics-Global data and Indian data system [3 lectures]
9. Economic Status of women in India [5 lectures]

References:

- Goldman, Marlene B., and Maureen C. Hatch, eds. *Women and health*. Elsevier, 1999.
- Bardhan, Kalpana, and Stephan Klasen. "UNDP's gender-related indices: A critical review." *World Development* 27.6 (1999): 985-1010.
- Becker, Gary S. "Human capital, effort, and the sexual division of labor." *Journal of labor economics* 3.1, Part 2 (1985): S33-S58.
- Sarfaraz, Leyla, Nezameddin Faghih, and Armaghan Asadi Majd. "The relationship between women entrepreneurship and gender equality." *Journal of Global Entrepreneurship Research* 4.1 (2014): 1-11.