

Structure of Syllabus
Two-year (Four Semester) M.A/M. Sc. Degree Course of
Economics under CBCS
University of Calcutta

Semester-I (20 credits, 250 marks)

Type of Course	Paper No.	Name of the Course	Credit	Marks	Remarks
Core Course 1	I	Microeconomics-I	4	50	
Core Course 2	II	Macroeconomics-I	4	50	
Core Course 3	III	Mathematical Methods for Economics	4	50	
Core Course 4	IV	Econometrics-I	4	50	
Core Course 5	V	Advanced Indian Economics	4	50	

Semester-II (20 credits, 250 marks)

Type of Course	Paper No.	Name of the Course	Credit	Marks	Remarks
Core Course 6	VI	Microeconomics-II	4	50	
Core Course 7	VII	Macroeconomics-II	4	50	
Core Course 8	VIII	Econometrics-II	2(Th)+2(P)	25+25=50	
Core Course 9	IX	Development Economics	4	50	
Core Course 10	X	History of Economic Ideas	4	50	

Semester-III (22 Credits, 250 marks)

Type of Course	Paper No.	Name of the Course	Credit	Marks	Remarks
Generic Elective-I	XI	Development Studies	4	50	
Core Course 11	XII	Project-I	6	50	It will be based on Review of Literature
Disciplinary Specific Elective-I	XIII	One paper from Group-A	4	50	Please see the list of papers as provided under Group-A
Disciplinary Specific Elective-II	XIV	One paper from Group-B	4	50	Please see the list of papers as provided under Group-B
Disciplinary Specific Elective-III	XV	One paper from Group-C	4	50	Please see the list of papers as provided under Group-C

Group A papers under semester III: Advanced Macroeconomics-I, Game Theory and Information-I, International Economics-I, Urban Economics-I, Public Economics-I, Economics of Industry-I. *All papers have 4 credits*

Group B papers under semester III: Advanced Econometrics-I, Operations Research-I (2(Th)+2(P)), Economics of Money and Finance-I, Economics of Institutions-I, Development Management-I, Political economy of Development-I, Experimental Economics-I. *All papers have 4 credits. For Operations Research there is a practical component so it is 2+2 credits*

Group C papers under semester III: Labour Economics-I, Economics of Agriculture –I, Urban Planning-I, Health Economics-I, Resource and Environmental Economics-I, Economics of Marx-I. *All papers have 4 credits.*

Semester-IV (22 Credits, 250 marks)

Type of Course	Paper No.	Name of the Course	Credit	Marks	Remarks
Generic Elective II	XVI	Indian Economics	4	50	
Core Course 12	XVII	Project-II	6	50	It will be based on original analysis
Disciplinary Specific Elective-II	XVIII	One paper from Group-A	4	50	Please see the list of papers as provided under Group-A
Disciplinary Specific Elective-III	XIX	One paper from Group-B	4	50	Please see the list of papers as provided under Group-B
Disciplinary Specific Elective-IV	XX	One paper from Group-C	4	50	Please see the list of papers as provided under Group-C

Group A papers under semester IV: Advanced Macroeconomics-II, Game Theory and Information-II, International Economics-II, Urban Economics-II, Public Economics-II, Economics of Industry-II. *All papers have 4 credits*

Group B papers under semester IV: Advanced Econometrics-II (2(Th)+2 (P)), Operations Research-II (2(Th) +2(P)), Economics of Money and Finance-II, Economics of Institutions-II, Development Management-II, Political economy of Development-II, Experimental Economics-II. *All papers have 4 credits. For Advanced Econometrics and Operations Research there are practical components so that for both the papers there are 2+2 credits*

Group C papers under semester IV: Labour Economics-II, Economics of Agriculture –II, Urban Planning-II, Health Economics-II, Resource and Environmental Economics-II, Economics of Marx-II. *All papers have 4 credits.*

So, all total we have $20+20+22+22=84$ credits and 1000 marks.

Core Courses

CC 1: Microeconomics I

Full Marks 50

- | | | |
|-------------|--|-------------|
| I. | Consumer Behaviour | [20] |
| | Choice of a representative consumer – Duality approach - Indirect Utility Function, Expenditure Function - Consumer surplus, Equivalent and compensating variation - revealed preference – choice under uncertainty - problem of aggregation – social choice | |
| II. | Theory of the Firm and the Competitive Market | [6] |
| | Cost minimization – envelope theorem for constrained optimization – duality; The competitive firm – market equilibrium – Pareto efficiency – taxes and subsidies. | |
| III. | General equilibrium | [18] |
| | The exchange economy – Equilibrium (Existence, uniqueness, stability) – Pareto Optimality - concept of core - Core equivalence theorem. One consumer one producer Economy | |
| | The Production Model- fixed and flexible coefficients – relation between endowments and product mix – relation between commodity prices and factor prices. | |
| IV. | Welfare | [6] |
| | First and Second Fundamental theorems of Welfare Economic – Pareto Optimality and Social Welfare Optima. | |

Reference

- Varian H. (2009) - Microeconomic Analysis, 3rd Edition, Viva Books Pvt. Ltd.
- MasColllel A., Whinston M. D. and Green J. R. (2012) - Microeconomic Theory, Oxford University Press, India
- Jehle G. A. and Reny P. J. (2006) – Advanced Microeconomic Theory, 2nd Edition, Pearson Education, India

CC2: Macroeconomics I

Full Marks 50

1. Background (10)
 - A. The Point of Departure- Circular relation between aggregate income and aggregate expenditure and two alternative approaches to Macroeconomics (Supply side approach and Demand based approach);
 - B. Introduction to Supply based Models: Wage-price flexibility and voluntary unemployment- Comparative Static Exercises- Labor in efficiency units and the Role of Economic Policy;
 - C. Introduction to Demand based Models: Relative Wage Hypothesis and Constant Money Wage- A model of Effective Demand with Money-wage Rigidity and the concept of Involuntary Unemployment- Volatile Expectation and Monetary versus Fiscal Policy in Recession;

2. Modern Version of Supply-side Models (40)
 - A. *Rational Expectation*: Adaptive Expectation, Rational Expectation and the Lucas Critique- A Market clearing Model with rational Expectation and the Policy Irrelevance Results- Limitation of Rational Expectation Theory and the passage to Real Business Cycle;
 - B. *Real Business Cycle*: Overlapping Generation Model and the Ricardian Equivalence- Exposition of Real Business cycle in an Overlapping Generation Model- Integration Between Trend and Cycle- Intertemporal Labor-Leisure Substitution and its Critique;
 - C. *Economic Growth*: Harrod-Domar Model (Point of Departure)- Exogenous Technical Progress and the Neo-classical Model of Growth- Endogenous Growth (the Human Capital Model and the R&D Model);

Selected Readings:

1. Hicks, J. 1971. *Social Framework: An Introduction to Economics*. Oxford University Press.
2. Keynes, J. M. 1936 (reprinted 2007). *The General Theory of Employment, Interest and Money*. London: Macmillan.
3. Davidson, P. 2011. *Post Keynesian Macroeconomic Theory*. Edgar Elgar.
4. Romer, D. 2011. *Advanced Macroeconomics*, McGraw Hill. (Text)
- 5 Lucas, R.E. and T, J. Sargent, T. J. 2011 (edited). *Rational Expectations and Econometric Practice, Volume 1*. University of Minnesota.
6. Hartley J, K Hoover and K. D. Salyer (Editor). 1998. *Real Business Cycles: A Reader*. Routledge.
7. Lucas, R.E. 1983. *Studies in Business-Cycle Theory*. MIT Press.
- 8 Miller, P, J. 1994. *The Rational Expectations Revolution: Readings from the Front Line*. MIT Press.
10. Jones, C.I and D Vollrath. 2013. *Introduction to Economic Growth*. WW Norton and Company.
11. Barro, R, J and Xavier I. Sala-i-Martin. 1998. *Economic Growth*. MIT Press.
12. Bhaduri, A.: *Macroeconomics - Dynamics of Commodity Production*, Palgrave Macmillan.

CC3: Mathematical Methods in Economics

Full Marks 50

- I. Static Optimization: Review of Classical Constrained Programming and Nonlinear Programming, Comparative Statics, Envelope Theorem, Saddle Point Theorem, Concave and Convex Programming. [10]
- II. Elements of point-set topology and real analysis: Metric Spaces, Continuity, Convergence, Weirstrass Theorem, Fixed-Point theorems. [10]
- III. Dynamic Optimization: Optimal Control Theory and Hamiltonian, Dynamic Programming. [8]
- IV. Choice under uncertainty: Risk and portfolio analysis. [8]
- V. Linear Models, matrix algebra and vector analysis. [6]
- VI. Differential Equations and Stability Issues: Differential Equations, Stability Theory, Phase Diagrams. [8]

References:

1. Dixit (1976): Optimization in Economic Theory, OUP
2. Beavis & Dobbs (1990): Optimization and Stability Theory for Economic Analysis, CUP
3. Intrilligator (1971); Mathematical Optimization and Economic Theory, Prentice Hall
4. Hadley (1960): Linear Algebra, Addison-Wesley, Massachusetts
5. Chiang (1992): Dynamic Optimization, McGraw Hill Inc.
6. Kamien & Schwartz (1981): Dynamic Optimization, North Holland

CC4: Econometrics I
Full Marks 50

- I. Single Equation Methods (with independent and identically distributed errors): [20]
- K-variable Classical Linear Regression Model: specification, Estimation, Hypothesis testing, Prediction;
 - Extension of CLRM: Qualitative Regressor - Dummy variables – Analysis of Stability;
- II. Relaxing Assumptions: [20]
- Generalized Linear Regression Model
 - Heteroskedasticity: Consequence, Detection, Correction
 - Autocorrelation: Consequence, Detection, Correction
 - Multicollinearity: Consequence, Detection, Correction
 - Stochastic Regressor (distributed lags)
- III. Simultaneous Equation System: [10]
- Problem of Identification: Structural Form and Reduced Form, Observational Equivalence, Rank and Order Condition;
 - Limited Information Estimation: Endogeneity problem, Instrumental Variable, Omitted Variable (Indirect Least Square, 2-Stage Least Square)

References:

Maddala, G S and Kajal Lahiri (2009), *Introduction to Econometrics*, John Wiley & Sons, England, 4th Edition.

Wooldridge, Jeffrey M (2009), *Introductory Econometrics: A Modern Approach*, South-Western Cengage Learning, USA, 4th Edition.

Johnston, Jack and John Dinardo (1997), *Econometric Methods*, McGraw Hill, New York, 4th Edition.

Gujarati, Damodar N and Dawn C Porter (2009), *Basic Econometrics*, McGraw Hill, New York, 5th Edition.

Kmenta, J (1986): *Elements of Econometrics* (2nd Edition), McMillan-Maxwell, NY;

CC5: Advanced Indian Economics

Full Marks 50

I. Transformation of the State and Economic Reforms

II. Growth and Sectoral Performance

- Aggregate GDP growth, structural change and productivity
- Agricultural growth and distribution
- Manufacturing growth and issues relating to productivity, market structure and economies of scale
- Issues relating to services-led growth
- Inclusive growth in 11th and 12th Plan

III. Trade and Payments Reforms in India

- Contours of trade and payments reforms in India including WTO related reforms in market access
- Merchandise trade performance and determinants
- Balance of Payments and issues related to accumulation of Foreign Exchange Reserves, Capital Account Convertibility

IV. Fiscal Reforms in India

- Profile of Fiscal Reforms
- Issues relating to deficit and growth, FRBM Act and fiscal prudence
- Reforms with respect to State Finances

V. Financial Sector Reforms in India

- Issues relating to reforms in banking, insurance, pensions, exchange rate and capital market

VI. Employment, Poverty, and Food Insecurity in India

- Measurement issues
- Regional and sectoral dimensions in employment, poverty and inequality
- Recent debates on poverty and employment during reforms

- Issues relating to rural and urban employment, livelihood security, National Urban Livelihood Mission and MGNREGA

- Rural and urban food insecurity
- The Public Distribution System
- Rural and urban infrastructures and delivery of services

References

- Acharya, Sankar and Rakesh Mohan (eds.) (2010), *India's Economy: Performance and Challenges*, OUP, New Delhi.
- Ahluwalia, M S, S S Tarapore and Y V Reddy (eds.) (2004), *Macroeconomics and Monetary Policy*, OUP, New Delhi.
- Balakrishnan, P (2010), *Economic Growth in India*, OUP, New Delhi.
- Basu, K (ed.) (2005), *India's Emerging Economy*, OUP, New Delhi.
- Bhaumik, S K (ed.) (2008), *Reforming Indian Agriculture: Towards Employment Generation and Poverty Reduction*, Sage Publications, New Delhi.
- Chakravarty, R (2006), *The Financial Sector in India*, OUP, New Delhi.
- Mahendra Dev, S (2008), *Inclusive Growth in India*, Oxford University Press, New Delhi.
- India Development Report*, Various years, OUP, New Delhi.
- Panagariya, A (2008), *India: The Emerging Giant*, OUP, New Delhi.
- Rakshit, M (2008a), *Macroeconomics of Post-Reforms India*, OUP, New Delhi.
- Rakshit, M (2008b), *Money and Finance in the Indian Economy*, OUP, New Delhi.
- Reddy, Y V (2004), *Lectures on Economic and Financial Sector Reforms in India*, OUP, New Delhi.

Selected articles from various journals will be referred in the class.

CC 6: Microeconomics II
Full Marks 50

I. Static Games of Complete Information [16]

Concept of a game – normal form representation – Prisoners' Dilemma - iterated elimination of dominated strategies – Nash equilibrium.

II. Dynamic Games of Complete Information [16]

Dynamic Games – subgames – backwards induction – subgame perfect Nash equilibrium – Entry Deterrence Game.

Repeated Games – Infinitely repeated games- folk theorem.

III. Market Failure [18]

Imperfect markets – Monopoly – Price discrimination – Durable goods monopoly; Oligopoly – Cournot, Bertrand and Stackelberg

Externalities and inefficiency – Pigouvian taxes

Incomplete markets – Property rights – Coase Theorem

Public goods – free rider problem – Efficient provision of a public good – voting

Incomplete information – Moral hazard and Adverse Selection

Reference

•Gibbons, R. - Game Theory for Applied Economists, Pearson Higher Education & Professional Group, 2010

•MasCollé A., Whinston M. D. and Green J. R. (2012) - Microeconomic Theory, Oxford University Press, India

•Jehle G. A. and Reny P. J. (2006) – Advanced Microeconomic Theory, 2nd Edition, Pearson Education, India

CC7: Macroeconomics II / Full Marks 50

I. Accounting (10)

a. Household accounting- Corporate Accounting- Government accounting- Rest of the world accounting- Bank Accounting (Central Bank and commercial Banks);

II. Open economy Macroeconomics (15)

a. Mundell-Fleming Model- Monetary and Fiscal Policy- Process of Adjustment and Exchange Rate Overshooting- An Alternative Formulation of the Process of Adjustment and Divergent Paths- Treatment of Financial Crisis in Mundell-Fleming Model;

III. Introduction to New-Keynesian Macroeconomics (15)

a. Keynes & New-Keynesian, Staggered Wage, rational Expectation and the Breakdown of the Policy irrelevance result- Menu Cost and the Fluctuation of Output- Model of Disciplinary Unemployment;

IV. Consumption and Investment (10)

a. Consumption Theory and Hall's Random Walk- Neo-classical Investment Theories and Tobin's q Theory;

Selected Readings:

1. Bhaduri, A.: *Macroeconomics - Dynamics of Commodity Production*, Palgrave Macmillan.
2. D'Souza, E.: *Macroeconomics*, Pearson Education.
3. Carlin W. and Soskice, D.: *Macroeconomics – Imperfections, Institutions & Policies*, Indian Reprint. Oxford University Press.
4. Heijdra, B.J.: *Foundations of Modern Macroeconomics*, Oxford University Press.
5. Romer, D.: *Advanced Macroeconomics*, McGraw Hill.
6. Sargent, T. J.: *Macroeconomic Theory*. Academic Press.
7. Vegh, C.A.: *Open Economy Macroeconomics in Developing Countries*, MIT Press.

CC8: Econometrics II (50 Marks with 25 practical)

I. Stochastic Trends: Time Series Data [12 + 8 (Lab)]

-Trend Stationary Process & Difference Stationary Process

-Random Walk and Unit root (detection, correction)

-Cointegration and Error Correction

-Test for Causality;

II. Limited Dependent Variables: Cross Section Data [10 + 8 (Lab)]

-Problem of Partial Observability- Truncation & Censoring of error distribution

-Switch from Least Square Technique to Maximum Likelihood Estimation: LPM,

LOGIT, PROBIT, TOBIT;

III. Introduction to Panel Data [8 + 4 (Lab)]

-Longitudinal Data: Usefulness

-Panel data models: Least Square Dummy Variable, Fixed Effect, Random Effect;

References:

- Maddala, G S and Kajal Lahiri (2009), *Introduction to Econometrics*, John Wiley & Sons, England, 4th Edition.
- Wooldridge, Jeffrey M (2009), *Introductory Econometrics: A Modern Approach*, South-Western Cengage Learning, USA, 4th Edition.
- Johnston, Jack and John Dinardo (1997), *Econometric Methods*, McGraw Hill, New York, 4th Edition.
- Baltagi, Badi H (2008), *Econometrics*, Springer-Verlag, Berlin, 4th Edition.
- Chatterjee Smprit & A S Hadi (2012): *Regression Analysis by Examples* (5th Edition); John-Wiley, NY;

CC9: Development Economics/ Full Marks 50

I. Development Discourse: The Present Setting

Growth-Inequality-Poverty debate: Economic Efficiency
Versus Social Justice

[6]

Inclusive Growth: Top Down versus Bottom Up approach;

II. Economic Liberalization and Developing Economies Concepts and
background of initiation of economic reforms

[4]

III. Economic Growth and Income Distribution

[20]

- (a) Capital Market: FDI- Modes, types, determinants, technology access & consequences
- Imperfections in Capital Market: organized and unorganized capital market
- (b) Labour Market: Informal Sector- Importance, Nature of employment, Linkages with
Formal Sector;
- (c) Land Market & Land Acquisition: Industry versus Agriculture Debate, the SEZ
controversy. Problems of acquisition of agricultural land, country experiences;
- (d) Market Inter-linkage: Effects on Growth and Income Distribution;

IV. Institutions and Governance

[8]

- (a) Institutions and economic development.
- (b) Provision of Public Good: Education- Health- Infrastructure
- (c) Social Security & Inclusion: Employment Generation- Credit Expansion- Other
Security Measures- An Introduction to Impact Evaluation;

V. Measurement Issues

- (a) Income based Measures: Poverty, Inequality

[12]

(b) Human Development Approach: Multidimensional Indices (achievement, deprivation, discrimination)

References:

1. Rodrik, D. (1995a): "Trade and Industrial Policy Reform," in J.R. Behrman and T.N. Srinivasan (eds.), *Handbook of Development Economics*, vol. III, B Amsterdam, North-Holland, 1995.
2. Rodrik D. (1995b): "The Political Economy of Trade Policy," in G. Grossman and K. Rogoff (eds.), *Handbook of International Economics*, vol. 3, Amsterdam, North-Holland, 1995.
3. Basu Kaushik (1997): "Analytical Development Economics: The Less Developed Economy Revisited".
4. Debraj Ray (1999): 'Development Economics'. OUP
5. Ravallion & Chen (2001): 'Measuring Pro-poor Growth'. World Bank
6. Aseem Srivastava & Ashish Kothari (2012): 'Churning the Earth: The Making of Global India'.
7. Shivkumar & Parr (1997): 'Readings in Human Development' OUP;

Several other articles are to be referred to the students during the course.

CC10: History of Economic Ideas**Full Marks 50**

- I. Classical theories of value and distribution: Physiocrats, Mercantilism, Theories of Adam Smith, Ricardo, Marx and others. [20]
- II. Evolution of neoclassical paradigm: General Equilibrium Theory, Keynesian economics, etc. [10]
- III. Evolution of critical economic theories: Theories of Kalecki, Sraffa, Post-Keynesian and Marxian theories; [10]
- IV. Approach of Economic Methodology: Positivism vs. Normativism, Causality Questions, Modernism vs. Postmodernism [5]
- V. Recent developments in Economic Theory and Methodolog [5]

References:

1. Schumpeter (1954): History of Economic Analysis, Harvard University Press
2. Screpanti & Zamagni (2005): An Outline of the History of Economic Thought, OUP
3. Blaug (1983): Economic Theory in Retrospect (3/e), Vikas Publishing, New Delhi
4. Meek (1962): Economics of Physiocracy, George Allen & Urwin

CC11: Project I

Project Proposal and Review of Literature

CC12: Project II

Final Dissertation

Discipline Specific Elective Courses

Group A

DSE A1/A2: Advanced Macroeconomics

DSE A1: Advanced Macroeconomics I (50 marks)

- Concept of macroeconomic equilibrium.
- Overlapping generation models.
- Business cycles.
- Growth and inequality.
- Disequilibrium macroeconomics.

DSE A2: Advanced Macroeconomics II (50 marks)

- Optimal growth models
- Recursive macroeconomic models
- Characterisation of chaotic dynamics
- Macroeconomics of developing countries

References:

1. Blanchard O.J. and Fisher, S.: *Lectures on Macroeconomics*, Indian Reprint, PHI Learning Pvt. Limited.
2. Brock, W.A. and Malliaris, A.G.: *Differential Equations, Stability and Chaos in Dynamic Economics*, North-Holland.
3. Dasgupta, D.: *Modern Growth Theory*, Oxford University Press.
4. Ljungvist, L. and Sargeant, T.: *Recursive Macroeconomic Theory*, MIT Press.
5. Medio, C.: *Chaotic Dynamics*, Oxford University Press.
6. Rakshit, M.: *Macroeconomics of Post-Reform India*, Oxford University Press.

DSE A3/A4: Game Theory and Information

DSE A3: Game Theory (50 marks)

- Static and dynamic non-cooperative games under complete information – revision
- Repeated games – Folk theorems - Applications
- Games under incomplete information
 - o Static games – Bayesian Nash Equilibrium – Applications
 - o 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 – MasColler, Whinston and Green
2. A Course in Game Theory – Osborne and Rubinstein
3. Game Theory – Fudenberg and Tirole

DSE A4: Economics of Information

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

References:

1. Microeconomic Theory – MasColler, 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

DSE A5/A6: International Economics

DSE A5: Trade Theory & Policy under Perfect Competition (50 marks)

A. Arbitrage, gains from trade and the concept of comparative advantage.

B. Fixed endowments: the exchange model

- The offer curve and the exchange equilibrium
- The terms of trade and real income,
- Stability of the exchange equilibrium.
- Comparative statics: (a) inter-country transfer (b) import substitution (c) export led growth and the possibility of immiserization.

C. Labor productivity and comparative advantage: the Ricardian model

- Absolute and comparative advantage, pattern of trade and specialization.
- Double factorial terms of trade.
- Specialization and country size.
- Specialization with a continuum of commodities.
- International labor mobility in the Ricardian model
- Ricardo and the “Missing Link”

D. Immobile factor and International trade: the short-run specific-factor model

- Immobile factors and income distribution,
- The pattern of trade,
- International factor mobility and the equalization of factor prices

E. Structure of endowments and the pattern of comparative advantage: the long run Heckscher-Ohlin-Samuelson model.

- Two sector general equilibrium model, the Rybczinski theorem, endowment and the pattern of trade: the Heckscher-Ohlin theorem
- Commodity prices and factor prices, factor price equalization and the Stolper-Samuelson theorem.
- The Leontief-paradox
- Inter-sectoral factor mobility and the relationship between the short-run and long run transformation schedule

F. The theory of tariff

- Tariff in a partial equilibrium framework: tariff and protection; revenue effect of tariff; deadweight loss from tariff
- Terms of trade, country-size and welfare
- Tariff in a general equilibrium framework: tariff and welfare, optimal tariff, maximum-revenue tariff, Metzler's paradox, equivalence between export and import tax.
- Tariff and income distribution: short run and long run effects of a tariff, the political economy of protection.
- Retaliation and tariff battle: high-tariff Nash equilibrium.
- Tariff and traded inputs: the effective rate of protection (ERP), calculation of the ERP, the content protection scheme

G. Trade policy with domestic distortions

- Non-optimality of free trade, optimal trade policy and the theory of the second best
- The infant industry argument

H. International Political Economy: WTO and the non-tariff barriers.

- Trade and environment
- Trade, labor standards and human rights

I. Basic Accounting:

- Balance of Payments Accounts
- National Income Accounting in Open Economy
- Money Accounting

J. Internal and External Balance:

- Role of Devaluation & Commercial Policies in a Simple Keynesian Model
- Extension to intermediate Goods & Non-traded Goods
- The Dependent Economy Model

K. Capital Mobility

- Stabilization policies under Fixed Exchange Rate
- Stabilization Policies under Flexible Exchange Rates
- Expectations & Exchange Rate Dynamics

DSE A6: Trade, Imperfect Competition and Development (50 marks)**A. Introduction: Rethinking International Trade****B. International Trade with Increasing Returns to Scale**

- IRS and Perfect Competition- Snowball Effect
- IRS and Monopolistic Competition- Intra-industry Trade
- Horizontal Product Differentiation
- Vertical Product Differentiation
- Differentiated Producers goods
- IIT in identical products

C. Oligopolistic competition and Strategic Trade Theory

- The Game Theoretic Structure of Strategic Trade Policy
- Profit-shifting Export Subsidy in a Third Market Model
- Strategic Trade Policy in a Reciprocal Market Model

D. Trade and Development - Background

- The Mercantilist obsession with trade surpluses.
- Brief views of Smith, Ricardo, Mill, Marx – Rosenstein-Rodan, Nurkse, Hirschmann, Myrdal.
- Trade as a vent for Surplus.
- The core periphery interpretation of trade and development and the drain theory.
- The infant industry argument.
- The Prebisch Singer argument.
- Unequal exchange theories.

E. The open dual economy

- Extensions of the Lewis model to trade situations.

F. Terms of trade and development

- The relationship between terms of trade and gains from trade in the static model.
- Growth maximization and internal and external terms of trade.

G. Immiserizing growth

- Bhagwati – Johnson – Brecher and Alejandro.

H. Trade on growth, growth on trade

- Effect of international trade on the Solow growth model
- Trade in the endogenous growth model.
- Pro trade growth vs anti trade growth in the neoclassical model.
- Effect of economic growth on intra-industry trade.

I. Technology and trade

- External economies, trade and growth
- Invention, innovation and temporary monopoly
- The Vernonian product cycle
- The contagion approach
- Technology gap models

J. In search of empirical support for trade and development

- An introduction to empirical trade theory
- Estimating the Heckscher-Ohlin model
- Wage inequality and trade
- Trade and economic development in the Newly Industrialized Countries.

K. GATT, WTO and the less developed countries

- Background of GATT
- From GATT to WTO
- The negotiation process in the WTO
- Non-tariff barriers
- Less developed countries and the WTO.

References:

- Rogoff & Obstfeld (1998): Foundations of International Macroeconomics, MIT Press
- Dornbusch (1980): Open Economy Macroeconomics, Norton
- Benassy (1984): Macroeconomics, Academic Press
- R. Jones, R. Caves and J. Frenkel (CJF), World Trade and Payments, 4th edition,
- R. Jones, International Trade: Essays in Theory, North Holland, 1979.
- Ronald Findlay, International Trade and Development Theory, Columbia University Press, 1973.
- Paul Krugman, Rethinking International Trade, 1994, MIT press.
- Jagdish N. Bhagwati, T. N. Srinivasan and Arvind Panagariya, Lectures on International Trade, MIT Press, 1998.
- Helpman & Krugman (1989): Trade Policy & Market Structure, MIT Press
- Kierzkowski (ed.): Monopolistic Competition and International Trade, 1984, OUP

DSE A7/A8: Urban Economics

DSE A7: Urban Economics I (50 marks)

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
6. Urban Sustainability – Environment and Pollution – The Economics of Pollution Control

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);
- Gottdiener, M and Budd, L.(2005), *Key Concepts in Urban Studies*, Sage Publications, London.
- Sassen Saskia, *The Impact of the new Technologies and Globalization on Cities* in Richard T. LeGates and Frederic Stout (ed) , *The City Readers* , Third Edition 2003, Routledge, London and New York
- Brooks. et. al (edited) (2012), *The Oxford Handbook of Urban Economics and Planning*, OUP London
- Web Resource:
- Behavioural Approach to Location, <https://people.hofstra.edu/.../behaviorallo..> Source : adopted from A. Pred (1967) *Behavior and Location: Foundations for a Geographic and Dynamic Location Theory*. Part I, Lund 1967; Part II, Lund 1969. [The Royal University of Lund, Department of Geography Studies in Geography Ser.B (Human Geography) Nos. 27 & 28C.W.K.Gleerup, Lund].

DSE A8: Urban Economics II (50 marks)

Urban Economics II

1. Urban in the Region – Theories of Urban and Regional Growth- New Economic Geography
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
 - (iv) Urban Transport – Issues related to special facilities (port etc.)
3. Urban poverty - slum and informal sector – Urban Poverty in India
4. Urban Infrastructure – Issues related to Facilities and Service Delivery
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
- Harvey, Jack, (2000), Urban Land Economics, New York, Palgrave
- Hoover. Edger. M and Giarratani.Frank, (1999) , An Introduction to Regional Economics, The Web Book of Regional Science
- 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

DSE A9/A10: Public Economics

DSE A9: Public Economics I: Public Expenditure and Taxation

- Introduction: Equity, efficiency and role of the state
- Public goods
 - Properties of public goods
 - Efficient vs. Private provision
 - Voluntary contributions for public goods
 - Lindahl taxes
 - Demand revealing mechanism
 - Merit goods and club goods
- Taxation
 - Incidence: Partial and General Equilibrium
 - Optimal taxation: Commodity and Income taxation
 - Taxation and savings
- Fiscal federalism
 - The Economic Theory of Federalism
 - Intergovernmental Transfers
 - Local vs. state taxes
- Corruption and related issues
- Empirical Issues in Public Economics

DSE A10: Public Economics II: Public Choice

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

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

DSE A11/A12. Economics of Industry**DSE A11: Economics of Industry I****Markets and Strategies - A revision**

Market definition, market power, concentration

Static Imperfect Competition

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

Dynamic Aspects of Imperfect Competition

Sequential choice: Stackelberg (one leader and endogenous no. of followers)- Commitment –
Free entry – Monopolistic Competition – Industry Concentration – Sunk Costs.

Product Differentiation

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

Industrialization

The Industrial Revolution in Britain – Evolution of Indian industry – Small scale industries -
Industrial policy post Independence – Policy shift: Globalization and reforms – Privatization
and PSUs in India – Case study of some important industries in India: jute, textiles, iron and
steel, pharmaceuticals, engineering goods and the IT sector

Competition Policy

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- Empirical merger analysis.

DSE A12: Economics of Industry II**Advertising**

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

Pricing Strategies and Market Segmentation

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

Product quality and information

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

Marketing Tools for experience goods

Warranties – Branding: Reputation and Competition

R&D and Intellectual Property

Innovation and R&D – Market structure and incentive to innovate – Patents – Optimal patent length and breadth, Licensing; Intellectuals property rights – TRIPS - Patent policy in India

Markets with network effect

Direct and indirect effects – switching costs

References

- P. Bellaflame and M. Peitz: Industrial Organization and Market Structure
- Tirole: The Theory of Industrial Organization
- O. Shy: Industrial Organization
- Cherunilam: Industrial Economics – An Indian Perspective
- Gokarn, Sen and Vaidya: The Structure of Indian Industry

Discipline Specific Elective Courses

Group B

DSE B1/B2: Advanced Econometrics

DSE B1: Advanced Econometrics I

Full Marks: 50

Group A: Time Series Econometrics (25 hours)

- Non-stationarity and Unit-root tests
- Cointegration and Error-correction models
- Vector Auto-regression models and causality tests
- ARIMA models and Box-Jenkins methodology
- ARCH-GARCH for modeling the variance

Group B: Multivariate Techniques in Social Science Research (25 hours)

- Simultaneous Multi-equation Models
- Estimation and Bias in the Simultaneous Equation Models
- Multivariate Analysis and Indexing: Factor Analysis, Principal Component Analysis;
- Grouping Observations: Discriminant Analysis, Cluster Analysis,
- Partial Correlation and Path Analysis, Analysis of Canonical Correlation;

References:

- Enders, W (2004): *Applied Econometric Time Series*, John-Wiley & Sons (2/e);
- Green (2003): *Econometric Analysis*, Pearson Education (5/e);
- Maddala & In-Moo Kim (1998): *Unit Roots, Cointegration and Structural Change*, CUP;
- Bannerjee, et al (1993): *Cointegration, Error Correction and the Econometric Analysis of Non-stationary Data*, OUP;
- Rencher (2002), *Methods of Multivariate Analysis* (2/e), John-Wiley & Sons;
- Tacq (1997): *Multivariate Analysis Techniques in Social Science Research*, Sage International.

DSE B2: Advanced Econometrics II
Full Marks: 50 (Theory 25 + Practical 25)

Theory/ Group- A: Advanced Econometric Methods (10 hours)

- Specification Error;
- Measurement Error;
- Maximum Likelihood Estimation & Generalized Method of Moments;
- Models with Expectation & Distributed Lag;

Group- B: Analysis of Cross-section Data (10 hours)

- Limited Dependent Variable Models (LOGIT, PROBIT);
- Censoring, Truncation & Selection Bias (TOBIT, Heckman Correction);
- Impact evaluation & p-score Matching;

Group- C: Analysis of Panel Data (10

hours)

- Models with Static Panel data;
- Models with Dynamic Panel data;

Practical/ Computer Applications (20 hours)

- Analysis of Cross-section, Time-series & Panel Data using suitable Statistical packages;
- Analysis of Multivariate Techniques using suitable Statistical Packages;

References:

- Maddala & Lahiri (2009): *Introduction to Econometrics* (4/e), John-Wiely;
- Baltagi (2005): *Econometric Analysis of Panel Data*, 3rd ed., John Wiley, New York.
- C. Hsiao (2003): *Analysis of Panel Data*, 2nd ed., Cambridge University Press.
- Wooldridge (2002): *Econometric Analysis of Cross Section and Panel Data*, The MIT Press.
- Greene (2009): *Econometric Analysis*, 6th ed., Prentice Hall,
- Arellano (2003): *Panel Data Econometrics*, Oxford University Press.
- Cameron and Trivedi (2009): *Microeconometrics Using Stata*, Stata Press.
- Tacq (1997): *Multivariate Analysis Techniques in Social Science Research*, Sage International.

DSE B5/B6: Economics of Money and Finance (BC)

DSE B5: Money and Finance I (50 marks)

Group A – Monetary Economics (25 marks)

- **Usefulness of money:** Search theoretic models of money – Overlapping generation models of money.
- **Different approaches to modeling money:** Money in the utility function – Cash –in-advance models.
- **Money and public finance:** Budget accounting- Equilibrium seigniorage – Friedman’s rule – optimal taxation and seigniorage - Fiscal theory of price determination.
- **New Keynesian monetary economics:** Taylor rules and other developments.

Group B – Financial Economics (25 marks)

- **Introduction** - Corporate Finance, Corporate Firm and its goals: basic concepts and ideas.
- **Corporate Financial Reporting** - Overview of financial statement analysis, Structure of Financial Statements: Balance Sheet, Income Statement, Statement of Cash Flow, Financial Ratios and Financial Statement Analysis.
- **Capital Budgeting Decision of firms** - Introduction to risk, return and opportunity cost of capital: measuring portfolio risk, diversification and risk, limits to diversification, Capital Asset Pricing Model.
- **Theories of Capital Structure** - capital structure and the pie theory, Maximizing firm value versus maximizing stockholders’ interest, Financial Leverage and Firm Value – Modigliani and Miller Propositions.
- **Introduction to Financial Markets-** Introduction to stock market, bond market and money market, their functions.

DSE B6: Money and Finance II (50 marks)

Group A – Monetary Economics (25)

- **Stock Market and Macroeconomics** – analysis of Tobin’s q, investment, effective demand
- **Bank Credit and Macroeconomics** – issue of credit rationing and effective supply failure; credit view, money view and effective demand
- **Financial Crisis** – alternative approaches; capital account liberalization and financial crisis in emerging market economies.
- **Exchange Rate Dynamics, Current Account and the Macroeconomics**

Group B – International Financial Economics (25)

- **The foreign exchange market** - participants, characteristics and operations.
- **The Spot market**- organization of the interbank spot market, direct, indirect and cross rates, Bid-ask spread, triangular arbitrage.
- **Foreign Exchange Exposure and Risk Management** – concepts only.
- **Introduction to currency derivative** - brief description of forward, futures and options market operations.
- **Multinational corporations** – origin, growth and operations.

Selected Readings:

Monetary Economics

1. Walsh, C.A.: *Monetary Theory and Policy*, Indian Reprint, PHI Learning Pvt. Limited.
2. Woodford, M.: *Interest and Prices - Foundation of a Theory of Monetary Policy*, Indian Reprint, New Age International Publishers.
3. Blanchard, O.J. and Fisher, S.: *Lectures on Macroeconomics*, Indian Reprint, PHI Learning Pvt. Limited.
4. Wickens, M.: *Macroeconomic Theory – A Dynamic General Equilibrium Approach*, Princeton University Press.

Financial Economics

1. Bhole, L.M. and Mahakud, J.: *Financial Institutions and Markets: Structure, Growth and Innovations*, Tata McGraw Hill Education.
2. Levi, M.D.: *International Finance*, Routledge.
3. Shapiro, A.C.: *Multinational Financial Management*, John Wiley and Sons, Inc.
4. Sharpe, W.F., Alexander, G.J. and Bailey, J.F.: *Investments*, Prentice Hall India Pvt. Ltd.

DSE B3/B4: Operations Research

DSE B3: Techniques of Operations Research I: 50 marks

Deterministic Models

Group A: 25 marks

- Deterministic models of Optimisation: Linear Programming, Transportation and Assignment models, Duality and Sensitivity Models, Integer Programming, Multiobjective Optimisation.
- Shortest Path and Discrete Dynamic Programming: Dynamic Programming Approach to Shortest Paths, CPM, PERT, Discrete Dynamic Programming models.
- Nonlinear Programming: Reduced Gradient Algorithm, Quadratic Programming, Separable Programming Methods
- Network Analysis: Optimal network flows
- Applications of Game Theory

Group B: 25 marks

Practical Applications of the Topics 1-5 in Group A based on software.

DSE B4: Techniques of Operations Research II: 50 marks

Probabilistic Models

Group A: 25 marks

- Decision Analysis: Decision making under different environment, Methods of Decision making under uncertainty
- Markov Chains: Stochastic Processes, Long Run Properties of Markov Chains, Continuous Time Markov Chains
- Queuing Theory: Queuing Systems, Probability Distributions, Queuing Process
- Inventory Theory: Deterministic and Probabilistic Models
- Simulation: Monte Carlo Method, Pseudo-Random Numbers and its application to economic problems

Group B: 25 marks

- Practical Applications of the Topics 1-5 in Group A based on software.

References:

- Hillier, F and Liberman, G(2006): Operations Research, McGraw Hill, India
- Taha, H(2000): Operations Research, Pearson Publication, India
- Rardin, R (1998): Optimization in Operations Research, Pearson Publication, India

DSE B7/B8: Economics of Institutions (BD)

DSE B7: Economics of Institutions I

1. Some basic concepts about institutions – different types of institutions and their roles in shaping incentives – property rights institutions and contract enforcement institutions – formal versus informal institutions – political and economic institutions.
2. Do institutions matter – empirical evidence – reversal of fortune – institutional explanation of the difference between North and South American economies – the rise of Western Europe.
3. What type of institutions matter – contract enforcement vs property right – unbundling institutions – effect of colonial legal origin – effect of different institutions in India – e.g. colonial land tenure, labor legislation, reservation for women and SC/ST in Panchayats.
4. Other competing explanations of development – culture and geography – interaction between culture, geography and institutions.

DSE B8: Economics of Institutions II

1. Why do institutions differ – the efficient institutions view -- political Coase theorem – the ideology view -- the incidental institutions view -- the social conflict view.
2. Factors behind the persistence of inefficient institutions -- hold up problem – the role of political losers -- the role of economic losers – the role of incomplete information.
3. Theory of informal institutions -- contract enforcements through reputation mechanism and role of community network– role of community in property right management - economic growth and its effect on networks.
4. Role of network 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

DSE B9/B10: Development Management (BE)**DSE B9: Institutions and their Interventions (50 marks)****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

DSE B10: Development and Opportunities (50 marks)**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

DSE B11/B12: Political Economy of Development (BF)**DSE B11: Political Economy of Development I (50 Marks)****Epistemology of Development**

- Enlightenment, colonialism and orientalism
- Classical Political Economy and capitalism
- Idea of dualism, economic dualism
- Transition, capitalist development and poverty eradication.
- History of Capitalist transition and Imperialism
- Introduction to critique of economic dualism and alternatives

Critical approaches to classical transition and development

- Transition beyond capitalism: Historical Materialism, mode of production and socialism
- Transition to capitalism as underdevelopment: Center-periphery, unequal exchange, dependency, regulation theory on a world scale; world system theory.
- Transition beyond development: Post-development approach.
- Transition and development beyond income and commodity: Capability, human development and justice
- Critique of the critical approaches

Class and Development

- Class focused economy: class, overdetermination, economy, capitalism, class justice and post-capitalist economy
- Class and need: surplus, class and development distribution, development justice, public policy, inclusion, poverty.
- Capitalist Hegemony: nodal point foregrounding and foreclosure; from third world to world of the third.
- A Critique of Political Economy of Development; reexamining dual economic model (Lewis, informal-formal, etc.); interrogating alternative theories of transition and development.
- Rethinking transition: reconstruction beyond the capitalist hegemonic; post-capitalist politics.

DSE B12: Political Economy of Development II (50 Marks)

- Capitalism and globalization: neoliberalism and global capitalism; formation of economic order in post-globalization period.
- Industrialization, dislocation and displacement: Capitalist development and Primitive Accumulation of third world/world of the third; compensation, resettlement and

management of dislocation; primitive accumulation on a global scale; critique of primitive accumulation; accumulation by dispossession.

- Biopolitical and social needs: Management of third world/world of the third; role of nation state and World Bank.
- Debates on approaches to poverty and its reduction strategy: Mainstream, Post-development, Capability and Marxian approaches.
- Environmentalist critique of capitalist development; environmentalism and ecosocialism; rational subject under capitalism; extinction, anthropocene, alternative subject and imagination of community economies.
- State theory: state under conditions of neoliberalism, capitalism and development; strategies, apparatuses and technologies of state.

References

- Basu, P. K. 2008. *Globalization: An Anti text*. Aakar Books.
- Chakrabarti, A. and Cullenberg, S. 2003. *Transition and Development in India*. Routledge.
- 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.
- Larrain, J. 1989. *Theories of Development: Capitalism, Colonialism and Dependency*. Polity Press.
- Pieterse, J.N. 2001. *Development Theory*. Vistaar Publications (Originally Sage Publications): New Delhi.
- 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.
- Sanyal, K. 2007. *Rethinking Capitalist Development: Primitive Accumulation, Governmentality and Post-Colonial Capitalism*. Routledge.
- Sen, A, K. 2003. *Rationality and Freedom*, Oxford University Press: New Delhi.
- Sen, A, K. 2009. *The Idea of Justice*, Penguin.
- Warren, B. 1980. *Imperialism: Pioneer of Capitalism*. Verso.

DSE B13/B14: Experiment Economics (BG)**DSE B13: Experiment Economics I**

1. Introduction: history, basics of experimental methods, advantage and limitations of economic experiments. [4]
2. Methods of conducting experiments [10]
 - laboratory experiments: artificial and artefactual aspects of laboratories
 - field and natural experiments: Advantages and Challenges
 - strategies of conducting experiment
 Games and decision-making: [22]
 - (1) monetised experiments
 - social preference experiments: (i) cooperation, (ii) trust and reciprocity, (iii) fairness and altruism
 - individual preference experiments: time and risk
 - Market-related experiments: auctions and asset markets
 - (2) non-monetized experiments: case studies
 - Choice under uncertainty: lotteries; expected utility theory, Allais paradox, subjective probability [10]
3. Any other related issues [4]

DSE B14: Experiment Economics II

1. Interdisciplinary theories and economics experiments: [4]
 - a. Prospect theory
 - b. Social identity theory
2. Non-standard experiments [14]
 - Common pool resource experiment
 - Gift Exchange
 - Lying and deception
 - Discrimination
 - Competition
 - Self-Serving Bias and Self-Signaling
3. Social Issues in Economic Experiments: [12]
 - Gender and Social Preferences
 - Leadership, punishment and cooperation
 - Peer Effects
 - Beliefs
 - Endowment Effect

4. Randomization, impact evaluation and the problem of causal inference-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. [10]
5. Survey of literature on: (i) Dictator game, (ii) Ultimatum game, (iii) Prisoners' Dilemma, (iv) Other forms of experiments [10]

References

- Gupta, Gautam (2015). An Introduction to Experimental Economics, Orient Blackswan
- Bardsley and others (2010). Experimental Economics, Princeton University Press.
- Plott and Smith (2008). Handbook of Experimental Economics Results, North-Holland.
- Kagel and Roth (1995). Handbook of Experimental Economics, Princeton University Press.
- Friedman and Sunder (1994). Experimental methods: A Primer for Economists, Cambridge University Press

N.B. 1. Other references such as articles published in different journals will be referred in the class.

Discipline Specific Elective Courses

Group C

DSE CIC2: Labour Economics (CA)

DSE C1: Labor Demand and Supply (50 marks)

- Human Capital, Individual Wage Determination, Schooling, Experience, and Earnings
- Unions and Collective Bargaining
- Labor Migration
- Economics of the Informal Sector
- Globalization and Labour
- Economics of Child Labour

DSE C2: Labour in India (50 marks)

- Characteristics of the Indian labour force,
- Wages and employment in agriculture,
- Industry and services,
- Importance of the informal sector,
- Employment and labour welfare policy.
- Trade unions,
- Women in the labour force.
- Rural urban migration.
- Investment in human capital.
- Globalisation and labour market reforms.
- Wage inequality,
- Child labour.

References:

- Cahuc, Pierre, and Andre Zylberberg. *Labor Economics*. Cambridge, Mass. and London: MIT Press, 2004.
- 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.
- Chaudhuri, Sarbajit and Mukhopadhyay, Ujjaini (2009): *Revisiting the Informal Sector: A General Equilibrium Approach*, Springer, New York, USA.
- Basu, Kausik (1997): *Analytical Development Economics*, Oxford University Press, Delhi.
- Marjit, S. and Acharyya, R. (2003): *International Trade, Wage Inequality and the Developing Economy: A General Equilibrium Approach*, Physica-Verlag.
- R. Solow (1990): *The Labour Market as an Institution*, Blackwell Publisher.

DSE C3/C4: Economics of Agriculture (CB)

DSE C3: Economics of Agriculture I

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 Rauser (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.

DSE C4: Economics of Agriculture II

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.

Articles published in various journals will be referred in the class.

DSE C5/C6: Urban Planning (CC)

DSE C5: Urban Planning I

1. Urban Planning: Evolution – changing perspectives – necessity for socio-economic planning in Urban Development
2. Economics of Urban Planning
3. Approaches to Urban Planning: Institutions – Decentralised and Participatory Planning
4. Developmental Planning - Land Use Control and Physical Planning
5. Tools for Planning
 - (i) Decision-making Techniques (Cost-benefit Analysis)
 - (ii) Introduction to Valuation and Pricing – Real Estate, Environment, Infrastructure
6. Information System and Urban Planning

Reference:

- Evans A.W, (1985), Urban Economics ,Basil Blackwell,
- Levy, (2012) Contemporary Urban Planning, Prentice Hall: New York, March
- www.gisdevelopment.net
- Indian Institute of Public Administration, Delhi, (1978) Collection of Papers, Urban Planning and Development Authorities,
- Jeffrey Stabbs and Cailies Clark, (1976), Megacity Management in the Asian and Pacific Region: Policy Issues and Innovative Approaches, ADB: Manila
- J G Keskar, (1998), The Basics of Town Planning, All India Institute of Local Self Government, Mumbai.
- Sylvie Faucheux & Martin O'Connor, (1998), Valuation for Sustainable Development: Methods and Policy Implications
- Robert Laurini, (2001), Information Systems for Urban Planning, Taylor and Francis: New York
- D Isaac and T Steley(2000), Property valuation Techniques, Macmillan: London

DSE C6: Urban Planning II

1. Sectoral Planning
 - (i) Transport
 - (ii) Environment
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

References:

- Dimitrou, T.H., (ed) (2013), Transport Planning for Third World Cities, Routledge Revivals, March;
- Button, K.J., Transport Economics, Edward Elgar Publishing Company, March, 2013
- Gupta, S, Passenger Transport Subsidy in West Bengal: Use and Misuse, Manak Publications Private limited, New Delhi, 2007
- Levy, Contemporary Urban Planning, , Prentice Hall: New York , March, 2012
- Reports of WBPCB, CPCB
- State of Environmental Report, 2009, Delhi
- Cities Alliance, (2007), Washington, (<http://www.citiesalliance.org/index.html>)
- Rodney R White, (1998), Urban Environmental Management, John Wiley: New York
- 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

DSE C7/C8 Health Economics (CD)

DSE C7: Health, Development and Related Issues (50 marks)

Economic Development and Health [14]

- State and Scope of Health Economics
- Normative economics and health
- Difference between health and health care
- Equity and Efficiency

The Macro Scenario [6]

- Cross Country comparison
- Health Care Cost Growth

Measurements of Health [10]

- Morbidity and Mortality
- Burden of Diseases
- Concepts of DALY and QALY
- Epidemiology and Morbidity Transition;

The Micro Scenario: Issues related to Health Care Utilization [12]

- Preventive and Curative Health care
- Public Health and political economy
- Socio-economic determinants of health

Linkages [8]

- Education
- Nutrition

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. Santerre R and S Neun (2007), *Health Economics: Theories, Insights and Industry Studies*. Thompson.
4. World Health Organisation (2000), *Report of Commission on Macroeconomics and Health'*
5. World Health Organization (2010), *Socioeconomic Determinants of Health*.
6. Zweifel P (1997), *Health Economics*.

DSE C8: Health Care Market (50 marks)**Health Care market and Demand for health care [12]**

- Health care as an input in health
- Notion of need'
- Supplier Induced demand
- Ex-ante and Ex-post Moral Hazard

Providers of health care [20]

- Hospitals
- Physician
- Insurance Market
- Pharmaceutical Industry
- Alternative Medicine

Quality of Health Care [4]

- 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
- Economics of Mental Health

References:

7. Cuyler A and J Newhouse (ed) (2000), *Handbook of Health Economics*. Elsevier.
8. Das Gupta Monica, Lincon Chen and T Srinivasan (1996), *Health, Poverty and Development in India*. OUP
9. Santerre R and S Neun (2007), *Health Economics: Theories, Insights and Industry Studies*. Thompson.
10. World Health Organisation (2000), *Report of Commission on Macroeconomics and Health'*
11. World Health Organization (2010), *Socioeconomic Determinants of Health*.
12. Zweifel P (1997), *Health Economics*.

DSE C9/C10: Resource and Environmental Economics (CE)

DSE C9: Resource and Environmental Economics-I Full Marks: 50

I: Conceptual Framework

- Economics, Ethics and the Environment;
- Ecological Economics and the Material Balance Approach;
- Environmental Economics and the Economics of Environment;

II: Economics of Exhaustible Resources

- 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;

III: Economics of Renewable Resources

- Forestry: Single versus Multiple use Forest- Optimal Rotation and Faustman's Rule;
- Fishery: The concept of Maximum Sustainable Yield (MSY), Optimization under alternative fishery management regimes-open access solutions, Fishery and fish biodiversity, Mangrove-fishery linkages, Basic ideas of the theory of aquaculture shrimp farming;

IV: Environmental Regulation

- Environmental Pollution as a Public Bad;
- Externality (Pigou), Property Rights (Coase), Optimal Pollution;
- Pollution Control: Alternative Market Based Instruments – pure policies (Emission Fees, Standard setting, and Tradable Pollution Permits), Hybrid instruments (two-part tariff), Double Dividend Hypothesis, and Illicit Dumping;
- Case Studies;

References:

- Costanza, et.al. (1998): *An Introduction to Ecological Economics*.
- Bhattacharyya, R.N. (2001): *Environmental Economics: Indian Perspective*, OUP.
- Fisher, A (1981): *Resource & Environmental Economics*, CUP.
- Conard & Clark (1987): *Natural Resource Economics: Notes & Problems*, CUP.
- Broomley (1995): *Handbook of Environmental Economics*, Blackwell.
- Hanley, Shogren & White (1997): *Environmental Economics*, McMillan.
- Pearce, D.W. and Turner. R.K.(1991) : *Economics of Natural Resource and Environment*, Harvester-Wheatsheaf.
- Kolstad (2000): *Environmental Economics*, OUP.
- James, Mishra & Murty (1999) *Economics of Water Pollution: The Indian Experience*. OUP.
- Baumol & Oates (1988): *Theory of Environmental Policy (2/e)*, CUP.

DSE C10: Resource and Environmental Economics-II Full Marks: 50

I: Common Property Resources

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

II: Sustainable Development and Green Accounting

- Environmental Kuznets Curve;
- Irreversibility, Uncertainty and Economic Development;
- Concept of Sustainability and constraints;
- Environmental Accounting: Basic Theory;
- Environmentally adjusted national product;

III: Environmental Valuation and Cost-benefit Analysis

- 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
 - Experimental Market;

IV: Global Issues and the Environment

- Trade, Development and Environment;
- The Pollution Haven Hypothesis;
- International/ Interregional Cooperation;
- The Problem of Managing Trans-national Commons;

References:

- Dasgupta, P (1982): *The Control of Resources*, HUP.
- Baland & Platteau (2003): Economics of Common Property Management Regimes in Mäler & Vincent (eds.) *Handbook of Environmental Economics*, Vol 1, North-Holland.
- M. Cole (1998): *Trade Liberalization, Economic Growth and Environment*. Edward-Elger.
- Perman, Ma, MacGilvray and Common (2003) *Natural Resource and Environmental Economics*, 4/e, Prentice Hall.
- Kadekodi , G. (2004): *Environmental Economics in Practice: Case Studies from India*, OUP.

DSE C11/C12: Economics of Marx (CF)**DSE C11: Economics of Marx I (50 Marks)*****Theory, Class, Economy, History and Justice***

1. Marxian Theory: A Critique of Political Economy.
2. Theory: Epistemology and entry point.
3. Deterministic Marxian Theory: Historical materialism and dialectical materialism; modes of production debate; debate on class
4. Analytical Marxism – Microfoundation approach
5. Non-deterministic Marxian Theory: Overdetermination and class; surplus and its forms; appropriation, exploitation, economy and society; class focused analysis; economy and capitalism, transition.
6. Justice and Ethics: exploitation-distribution-economic democracy, problem of capitalism.

Theories of power, culture and subjection

7. Power: Sovereign, disciplinary, biopolitical; repressive and ideological state apparatuses, state of exception.

Hegemony, Politics and post-capitalist politics

DSE C12: Economics of Marx II (50 Marks)***Value and Distribution***

- Reading Capital: Value Theory and Surplus: Commodity and money; Labor power, Labor process, Class process, Surplus Value and Capital
- Capitalists and Workers: productive and Unproductive
- Theory of Distribution; Income, Wage and Profit
- Surplus labor beyond capital; household economy

Theory of Enterprise

- Class nature of enterprise
- Capitalist enterprise: state and private, productive and unproductive, local and global
- Feudal, Independent and Communist enterprise

Primitive Accumulation:Theory of origin of capitalism in Marx's 'Capital' and Late Marx

Debates on Value, Distribution and Capitalism

- Transformation problem
- Falling rate of profit
- Capitalism, socialism and communism
- Business cycles, crisis and policy

Approaches and debates on transition

- Beyond market and planning: contested meanings of transition
- Feudalism to capitalism; capitalism to socialism/communism

References

- Althusser, L and E, Balibar. 1975. *Reading Capital*. Verso.
- Marx, K. 1976. *Grundrisse: Foundations of the Critique of Political Economy*. Penguin Classic.
- Chakrabarti, A, and S, A, Dhar. 2009. *Dislocation and Resettlement in Development: From Third World to World of the Third*. Routledge: London and New York. 2009.
- Chakrabarti, A, A, Dhar and Cullenberg, S. 2012. *World of the Third and Global Capitalism*. Worldview Press.
- Chakrabarti, A, S, A, Dhar and B, Dasgupta. 2014. *The Indian Economic in Transition: Neoliberalism, Capitalism and Development*. Cambridge University Press.
- Cohen, G.A. 1978. *Karl Marx's Theory of History: A Defence*. Princeton University Press.
- Cohen, G.A. 1988. *History, Labour and Freedom: Themes from Marx*. Clarendon Press. Foley, D. K. 1986. *Understanding Capital: Marx's Economic Theory*. Harvard University Press,
- Gibson-Graham, J. K. 1996. *The End of Capitalism (as we knew it): A Feminist Critique of Political Economy*. Blackwell Publishers Ltd.
- Gibson-Graham J.K. 2006. *The Postcapitalist politics*. University of Minnesota Press.
- Harvey, D. 2010. *A Companion to Marx's Capital*. Verso.
- Howard, M and King, J. 1989. *A History of Marxian Economics. Vol1 and 2*. Princeton University Press.
- Resnick, S. A. and Wolff, R. D. 1987. *Knowledge and Class: A Marxist Critique of Political Economy*. University of Chicago Press.
- Resnick, S and R, Wolff. 2002. *Class theory and History: Capitalism and communism in the U.S.S.R.* Routledge
- Resnick, S. and R. Wolff. 2012. *Contending Economic Theories*. MIT Press.
- Roemer, J. (ed.). 1986. *Analytical Marxism*. Cambridge University Press.
- Shanin, T. 1983. *Late Marx and the Russian Road: Marx and the Peripheries of Capitalism*, Routledge, GB. Monthly Review US
- Sweezy, P.M. 1942. *The Theory of Capitalist Development: Principles of Marxian Political Economy*. Monthly Review Press,

Debates on Value, Distribution and Capitalism

- Transformation problem
- Falling rate of profit
- Capitalism, socialism and communism
- Business cycles, crisis and policy

Approaches and debates on transition

- Beyond market and planning: contested meanings of transition
- Feudalism to capitalism; capitalism to socialism/communism

References

- Althusser, L and E, Balibar. 1975. *Reading Capital*. Verso.
- Marx, K. 1976. *Grundrisse: Foundations of the Critique of Political Economy*. Penguin Classic.
- Chakrabarti, A, and S, A, Dhar. 2009. *Dislocation and Resettlement in Development: From Third World to World of the Third*. Routledge: London and New York. 2009.
- Chakrabarti, A, A, Dhar and Cullenberg, S. 2012. *World of the Third and Global Capitalism*. Worldview Press.
- Chakrabarti, A, S, A, Dhar and B, Dasgupta. 2014. *The Indian Economic in Transition: Neoliberalism, Capitalism and Development*. Cambridge University Press.
- Cohen, G.A. 1978. *Karl Marx's Theory of History: A Defence*. Princeton University Press.
- Cohen, G.A. 1988. *History, Labour and Freedom: Themes from Marx*. Clarendon Press. Foley, D. K. 1986. *Understanding Capital: Marx's Economic Theory*. Harvard University Press,
- Gibson-Graham, J. K. 1996. *The End of Capitalism (as we knew it): A Feminist Critique of Political Economy*. Blackwell Publishers Ltd.
- Gibson-Graham J.K. 2006. *The Postcapitalist politics*. University of Minnesota Press.
- Harvey, D. 2010. *A Companion to Marx's Capital*. Verso.
- Howard, M and King, J. 1989. *A History of Marxian Economics. Vol1 and 2*. Princeton University Press.
- Resnick, S. A. and Wolff, R. D. 1987. *Knowledge and Class: A Marxist Critique of Political Economy*. University of Chicago Press.
- Resnick, S and R, Wolff. 2002. *Class theory and History: Capitalism and communism in the U.S.S.R.* Routledge
- Resnick, S. and R. Wolff. 2012. *Contending Economic Theories*. MIT Press.
- Roemer, J. (ed.). 1986. *Analytical Marxism*. Cambridge University Press.
- Shanin, T. 1983. *Late Marx and the Russian Road: Marx and the Peripheries of Capitalism*, Routledge, GB. Monthly Review US
- Sweezy, P.M. 1942. *The Theory of Capitalist Development: Principles of Marxian Political Economy*. Monthly Review Press,

General Elective Courses

GE 1: Development Studies Syllabus

Topics:

1. Evolution of development experience and development thinking; [4]
2. The rise and fall of developmentalist models; from classical roots to neo-classical and institutional economic thinking. [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 [8]
4. Efficiency and distributive justice – utilitarianism to Rawls, Roemer, Sen; income poverty and capability deprivation [10]
5. Market failure; economic role of the state; government failure. [4]
6. State, Market and Economic Development: Country experiences [4]
7. Inequality and Economic Development – post-war evolution of global inequality [10]
8. Market and alternative institutions; market and efficiency; market and freedom; [4]

Essential Readings:

- 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 University Press [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 of Opportunity’, In: Kenneth Arrow, Samuel Bowles and Steven Durlauf (eds) *Meritocracy and Economic Inequality*, Oxford: Oxford University Press.
- Amartya, Sen 2000. *Development as Freedom*, Oxford: Oxford University Press, [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.

GE 2: Indian Economics Syllabus

1. National Income

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

[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.

[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.

[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.

[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.

[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 India—definition, estimates, genesis, consequences and remedies, demonetisation and black money.

[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.

[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

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

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, 2018, 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 2018-19.
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.

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 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 Projects. If a Course of 50 marks contains both theory (25 marks) and practical (25 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 Project.

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. [Group A: DSE1 to DSE12; Group B: DSE13 to DSE26; Group C: DSE27 to DSE38]

11. New Fields may be added in each group from time to time as recommended by the Board of Post Graduate 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,(c) 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 Project the final grade will be 40% internal assessment and 60% end-semester evaluation.

16. The First Semester will comprise of five Core Courses (theory) of 50 marks each. The Second Semester will cover five Core Courses of 50 marks each (four of which will be fully theory and the remaining one will be partly theory with 25 marks and partly practical with 25 marks). The Third Semester will include one Core Course (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 (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.

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 maximum of two Theory or Practical Courses 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. Having been unsuccessful/failed or remaining absent in more than two Courses a candidate shall be considered unsuccessful in the Semester and will have to clear the Semester by appearing in the supplementary examination to be held for the partially unsuccessful students. Two chances will be available for each Course. Only after clearing the required number of Courses in supplementary examinations one can proceed for the higher Semester.

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 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 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 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 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 40 marks shall be 2 hours and that of 20 marks would be 1 hour.

45. Duration of examination for each practical paper of 30 marks shall be 2 hours and that of 15 marks would be 1 hour.

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

Course No.	Course Name	Type of Course
CC1	Microeconomics I	Core
CC2	Macroeconomics I	Core
CC3	Mathematical Methods in Economics	Core
CC4	Econometrics I	Core
CC5	Advanced Indian Economics	Core
CC6	Microeconomics II	Core
CC7	Macroeconomics II	Core
CC8	Econometrics II	Core
CC9	Development Economics	Core
CC10	History of Economic Ideas	Core

CC11	Project I	Core
CC12	Project II	Core
DSE 1	Advanced Macroeconomics I	Discipline Specific Elective
DSE 2	Advanced Macroeconomics II	Discipline Specific Elective
DSE3	Game Theory and Information I	Discipline Specific Elective
DSE 4	Game Theory and Information II	Discipline Specific Elective
DSE5	International Economics I	Discipline Specific Elective
DSE6	International Economics II	Discipline Specific Elective
DSE7	Urban Economics I	Discipline Specific Elective
DSE8	Urban Economics II	Discipline Specific Elective
DSE9	Public Economics I	Discipline Specific Elective
DSE10	Public Economics II	Discipline Specific Elective
DSE11	Economics of Industry I	Discipline Specific Elective
DSE12	Economics of Industry II	Discipline Specific Elective
DSE13	Advanced Econometrics I	Discipline Specific Elective
DSE 14	Advanced Econometrics II	Discipline Specific Elective
DSE15	Operations Research I	Discipline Specific Elective
DSE16	Operations Research II	Discipline Specific Elective
DSE17	Economics of Money and Finance I	Discipline Specific Elective
DSE18	Economics of Money and Finance II	Discipline Specific Elective
DSE19	Economics of Institution I	Discipline Specific Elective
DSE20	Economics of Institution II	Discipline Specific Elective
DSE 21	Development Management I	Discipline Specific Elective
DSE22	Development Management II	Discipline Specific Elective
DSE 23	Political Economy of Development I	Discipline Specific Elective
DSE24	Political Economy of Development II	Discipline Specific Elective
DSE25	Experimental Economics-I	Discipline Specific Elective
DSE26	Experimental Economics-I	Discipline Specific Elective
DSE27	Labour Economics I	Discipline Specific Elective
DSE28	Labour Economics II	Discipline Specific Elective
DSE29	Economics of Agriculture I	Discipline Specific Elective
DSE30	Economics of Agriculture II	Discipline Specific Elective
DSE31	Urban Planning I	Discipline Specific Elective
DSE32	Urban Planning II	Discipline Specific Elective

DSE33	Health Economics I	Discipline Specific Elective
DSE34	Health Economics II	Discipline Specific Elective
DSE35	Resource & Environmental Economics I	Discipline Specific Elective
DSE36	Resource & Environmental Economics II	Discipline Specific Elective
DSE37	Economics of Marx I	Discipline Specific Elective
DSE38	Economics of Marx II	Discipline Specific Elective
GE1	Development Studies	Generic Elective
GE2	Indian Economics	Generic Elective

Semester I: (50 x 5 = 250 marks)

Paper I: CC1 (Theory)
Paper II: CC2 (Theory)
Paper III: CC3(Theory)
Paper IV: CC4 (Theory)
Paper V: CC5 (Theory)

Semester II: (50 x 5 = 250 marks)

Paper VI: CC6 (Theory)
Paper VII: CC7 (Theory)
Paper VIII: CC8 (Group A: Theory; Group B: Practical)
Paper IX: CC9 (Theory)
Paper X: CC10 (Theory)

Semester III (50 x 5 = 250 marks)

Paper XI: GE1 (Theory)
Paper XII: CC11 (Project)
Paper XIII: Field A (DSE 1/3/5/7/9/11)
Paper XIV: Field B (DSE 13/15/17/19/21/23/25)
Paper XV: Field C (DSE 27/29/31/33/35/37)

Semester IV(50 x 5 = 250 marks)

Paper XI: GE 2 (Theory)
Paper XII: CC12 (Project)
Paper XIII: Field A (DSE 2/4/6/8/10/12)
Paper XIV: Field B (DSE 14/16/18/20/22/24/26)
Paper XV: Field C (DSE 28/30/32/34/36/38)