



SINGHANIA UNIVERSITY

(Established by the Govt. of Rajasthan & recognized as per section 2f of UGC Act, 1956)
Pacheri Bari, Distt. Jhunjhunu (Rajasthan) - 333515

SINGHANIA UNIVERSITY



CURRICULUM AND SYLLABUS

M.A. In Economics

YEAR I

Subject Code	Subject
EC- 101	Micro Economics
EC- 102	Public Finance
EC- 103	International Economics
EC- 104	Basic Statistics
EC- 105	Mathematics for Economics
EC- 106	Economics of Agriculture
EC- 107	Statistical Techniques

YEAR II

Subject Code	Subject
EC- 201	Economic of Growth and Development
EC- 202	Research Methodology for Economics
EC- 203	Methods of Econometrics
EC- 204	Banking and financial Institutions
EC- 205	Institutional Economics
EC- 206	Economics of Discrimination
EC- 207	National Income Accounting

Year -I

EC-101 Micro Economics - I

Topic I Introduction

1. Introduction to Microeconomics
2. Market and Price Mechanism
3. Disturbances to equilibrium, floor price, ceiling price.

Topic II Consumer Theory

1. The concept of and Measurement of Utility: Cardinal and Ordinal.
2. Theory of Consumer Choice: Marginal Utility Theory, Indifference curve approach, Income and Price expansion paths, Demand Curve. Income and Substitution Effects: Slutsky and Hicksian approach.
3. Theory of Revealed Preference.
4. Concept of Elasticity: Price, Income and Cross Elasticities.
5. Concept and Measurement of Consumers' Surplus.

Topic III Production Theory

1. Production Function – One input, two inputs: Isoquants, Isocosts. Cobb- Douglas Production Function.
2. Law of Variable Proportions Returns to the Variable Factor Returns to Scale.
3. Producer's Equilibrium with One Input and Two Inputs.
4. Cost Curves, Total, Average and Marginal Cost Curves. Short Run and Long Run Cost Curves.
5. Derivation of Supply curve, Firm and Industry, Short Run and Long Run.
6. Concept and Measurement of Producers' Surplus.

Topic IV The Theory of Public Choice

1. Pareto Optimality
2. Bergson-Samuelson Social Welfare Function.
3. Compensation Criteria.
4. Arrow's Social Welfare Function and Impossibility Theorem.
5. Amartya Sen's Collective Choice Theory.

Recommended Books:

1. Varian, Hal (1996): Intermediate Microeconomics, W.W. Norton and Company, New York.
2. Hirschleifer J and A. Glazer and D Hirschleifer (2005): Price Theory and Applications, Prentice Hall of India, New Delhi.
3. Pindyck, Robert, Rubinfeld and Prem Mehta (2009): Micro Economics, Pearson, Prentice Hall of India, New Dehli.

4. Sen, A.(1999): Micro Economics: Theory and Applications, Oxford University Press, New Delhi.
5. Misra S.K. and V.K. Puri (2001): Advanced Microeconomic Theory, Himalay Publishing House, Mumbai.
6. Kreps, David, M (1990): A Course in Microeconomic Theory, Prentice Hall of India, New Dehli.

Year -I

EC-102 Public Finance

Topic I Introduction

1. Role of government in organized society: changing perspective
2. Government in a mixed economy, public and private sector, government as an agent for economic planning and development Stabilization policy
3. Private goods, public goods and merit goods.

Topic II Rationale for Public Policy

1. Allocation of resource provision of public goods
2. Voluntary exchange models – Impossibility of decentralized provision of public goods - contributions of Samuelson and Musgrave
3. Demand revealing schemes for public goods, contributions of Clark, Groves and Leyard, Tiebout model
4. Theory of club goods

Topic III Public Expenditure

1. Wagner's law of increasing state activities
2. Wiseman-Peacock hypothesis, Pure theory of public expenditure
3. Structure and growth of public expenditure – Criteria for public investment – Social cost-benefit analysis – Project evaluation – Estimation of costs – Discount rate – Reforms in expenditure budgeting
4. Gender budgeting

Topic IV Taxation

1. Theory of incidence Alternative concepts of incidence –
2. Allocative and equity aspects of individual taxes, Benefit and ability to pay approaches
3. Theory of optimal taxation, Excess burden of taxes, Trade-off between equity and efficiency.

Topic V Public Debt

1. Burden of public debt
2. Sources of public debt

3. Public borrowings and price level, Crowding out of private investment and activity
4. Principles of debt management and repayment.

Recommended Books

1. Musgrave R. A. and Musgrave P. S. – The theory of Public Finance (different editions)
2. Stiglitz Joseph – Economics of the Public Sector (different editions)
3. Herber – Modern Public Finance (different editions)

Year- I

EC-103 International Economics

Topic I Overview of classical and modern trade theories

1. Classical theories of trade – Ricardo and the concept of Comparative Cost theory - opportunity cost
2. Heckscher Ohlin theorem, Verification of physical criterion and price criterion, Leontief paradox
3. Factor price equalization and explanation with Edgeworth Box diagram

Topic II New trade theories

1. New theories of trade, product life cycle and technology gap models
2. Preference similarity and intra-industry trade, economies of scale and monopolistic competition – Krugman
3. Theory of economic geography – Krugman, Neo-Heckscher Ohlin theorem

Topic III Terms of Trade

1. Gains from trade – offer curve
2. Growth and Terms of Trade
3. Different concepts of Terms of Trade and factors affecting Terms of Trade

Topic IV Trade Policy

1. Free trade vs. controlled trade
2. Tariffs and non-tariff barriers on trade, Effects of tariffs under partial equilibrium. (Price effect, terms of trade effect, competitive effect, income effect, revenue effect)
3. Effects under general equilibrium, Stolper – Samuelson theorem

Topic V Regional Integration

1. Customs Unions: Features of customs union theory.
2. Trade creation and trade diversion under customs union (with graphical treatment)
3. The creation of European Union

Topic VI GATT and WTO

1. International trade agreements. Dunkel proposal.
2. WTO, Important Agreements under WTO,
3. Major developments since 1995,

4. Expected effects on the Indian economy.

Recommended Books

1. Paul R. Krugman & Maurice Obstfeld (2009) International Economics Theory and Policy. Pearson Education Publication New Delhi
2. Chacholiades, M. (1990), International Trade: Theory and Policy, McGraw Hill, Kogakusha, Japan.
3. Kindleberger, C.P. International Economics, R.D. Irwin, Homewood.
4. Salvatore, D. (1997), International Economics, Prentice Hall, Upper Saddle River, N.J., New York.
5. Soderston, Bo (2005), International Economics, The Macmillan Press Ltd., London.
6. GATT, the Dunkel Draft and India J. M. Economic and Political Weekly, Vol. 27, No. 4 (Jan. 25, 1992), pp. 140-142

Year- I

EC- 104 Basic Statistics

Topic I Basic Math

1. Ratios
2. Writing a ratio in its simplest form, average rate
3. Direct and Inverse proportion, Problems involving ratio, rate and proportion
4. Expressing one quantity as a percentage of another, comparing two quantities by percentage greater than 100 %, Increasing/Decreasing a quantity by a given percentage, reverse percentages, problems involving percentages

Topic II Graphs and Diagrams

1. Graphs and Interpretation of graphs
2. Types of graphs: Bar Diagram, Flow charts, Pie charts, Pictograph, line Graphs, time series graphs, Stem and leaf Plot, Histogram, Dot Plot, Scatter plot
3. Types of Functions, and functions and graphs

Topic III Set Theory

1. Set language and Notations

Topic IV Basic Statistics

1. Measures of Central Tendency
2. Dispersion and Standard deviation
3. Skewness and Kurtosis

Topic V Sampling and Sampling Techniques

1. Principles of Sampling and factors affecting the inferences drawn from a sample
2. Concept of population, Sample, Sampling Frame and Sampling unit
3. Characteristics of representative sample
4. Sampling error
5. Types of Probability sampling techniques
6. Types of Non-probability sampling techniques

Recommended Books

1. Basic Statistics - A. L. Nagar and R. K. Das
2. Mathematics and statistics for Economics- G.S. Monga
3. Statistical Methods - S.P. Gupta
4. Statistical Methods – S.C. Gupta
5. Statistics- Schaum's outlines , Murray R. Spiegel; Larry J Stephen

Year - I

EC-105 Mathematical techniques for Economics

Topic I Basic Application in Economics

1. Review and Basic Applications in Economics

Topic II Exponential and Logarithmic Functions

1. Single Variable Calculus
2. Marginal Concepts b Elasticity
3. Optimization Techniques in Consumer and Production Theory
4. Consumer and Producer Surplus

Topic III Multivariate Calculus

1. Economic Functions
2. Unconstraint Optimization
3. Constraint Optimization
4. Special Matrices (Jacobian and Hessian)
5. Comparative Statics and Concave Programming

Topic IV

1. First Order Differential Equation
2. First Order Difference Equations
3. Second Order Differential Equations

Topic V Growth Models

Recommended Readings

1. Introduction to Mathematical Economics - Edward Dowling
2. Mathematics for Economists - Simon and Blume
3. Fundamental Methods of Mathematical Economics - Chiang

3. Important International Financial Crisis and the role of IMF (Oil crisis, International debt crisis, South East Asian crisis, Brazil Argentina and Mexico, Russia and Eastern Europe, The sub-prime crisis)

Recommended readings

1. James Ingram: International Economics (Ed. 1995)
2. Krugman International Economics (latest edition)
3. Kennen International Economics (latest edition)
4. Maurice Levi: International Finance
5. Killick, T (1995), IMF Stabilisation Programme, Journal of Development Economics; Volume 32, No. 1, pp.158-178.
6. Mukherjee Smriti, Capital Account Liberalization & Flexible Exchange Rate
7. Salvatore, D ., International Economics 8th edition John Wiley and Sons, Inc

Year- I

EC-106 Economics of Agriculture

Topic I Introduction

1. Fundamental differences between agricultural economics and economics of other businesses
2. Agrarian Questions and Differing forms of Capitalist Agrarian Transition
3. Mode of Agricultural Sectors
4. Classification of Farmers
5. Structure of Backward Agriculture- Causes of low investment and low productivity
6. Risk and Uncertainty in production- Inputs related risk and risk aversion, Adoption of Modern Technology under production uncertainty

Topic II Demand and Supply of agricultural products

1. Production function analysis in agricultural production behavior
2. Economics of supply of agricultural products
3. Theories of Marketable and Marketed Surplus
4. Theory of Demand for agricultural products
5. Price and Income elasticities of Demand for agricultural products
6. Factors affecting demand for agricultural products

Topic III Price determination in agriculture

1. Free market mechanism analysis
2. Fluctuation in agricultural prices
3. Wholesale and retail markets
4. Price spread
5. Role of hedging and speculation
6. Forward markets in agricultural commodities.

Topic IV Major aspects of Indian Agriculture

1. Institutional aspects of agricultural development in India
2. Growth and fluctuations in Indian Agriculture
3. Farm size, productivity and efficiency in Indian Agriculture
4. Price and Terms of Trade
5. Risk and Uncertainty

Topic V Agricultural Policy

1. Agricultural Price Policy in India - Minimum Support Price
2. Food Security– Food Corporation of India and Public Distribution System
3. Indian Agriculture in context of WTO regime

Recommended Books

- 1) Drummond E. V. and Goodwin J. W. – Agricultural Economics
- 2) Penson J, Capps O and Rosson – Introduction to Agricultural Economics
- 3) Sadhu and Singh - Agricultural Economics
- 4) Reddy R and Sastry D – Agricultural Economics
- 5) Lakhi and Singh – Agricultural Economics
- 6) Basu, K (1990): Agrarian Structure and Economic Development, Hardware Economic Publisher
- 7) Basu, K and P. Nayak (1992): Development Policy and Economic Theory, Oxford University Press
- 8) Basu, K (1997): Agrarian Questions, Oxford University Press, New Delhi
- 9) Bhaduri, A (1983): The Economic Structure of Backward Agriculture, Macmillan India Limited
- 10) Bardhan, Pranab (1989). The Economic Theory of Agrarian Institutions (Ed), Clarendon Press Oxford
- 11) Abhirup Sarkar (1993): On the formation of Agricultural Price, Journal of Development Economics
- 12) Ghatak, S and K. Inseigent (1984): Agriculture and Economic Development, Select Book Service
- 13) Acharya S S and N L Agarwal (1994): Agricultural Prices- Analysis and Policy, Oxford and IBH, New Delhi
- 14) Gulati, A, Maurice R. Landes, Ganguly, K. (2009): Indian Agriculture: Managing Growth with Equity, A publication of the Agricultural and Applied Economics Association
- 15) Dandekar, M L (1987): Growth and Equity in Agriculture, International Journal of Agriculture Economics
- 16) Shah, C H (1986): Growth and Inequality in Agriculture, International Journal of Agriculture Economics
- 17) Sen A K, and Rudra A (1980): Farm Size and Labour Use: Analysis and Policy, Economic and Political Economics
- 18) Ramesh Chand, P A, Lakshmi Prasanna, Arun Singh (2011): Farm Size and Productivity: Understanding the Strengths of Smallholders and Improving their Livelihood, Economic and Political Weekly Supplements
- 19) Rudra, Ashok (1984): Indian Agriculture: Myths and Realities
- 20) Joshi, P C (1987): Institutional Aspects of Agricultural Development

Year- I

EC-107 Statistical Techniques

Topic I Introduction to statistics

1. Overview of Basic statistical concepts,
2. Central tendency and dispersion, Skewness and Kurtosis

Topic II Correlation and regression

1. Correlation coefficient, Standard error and regression equations,
2. One variable regression analysis

Topic III Fundamentals of Probability

1. Random Variable, and Mathematical Expectation,
2. Theoretical Distributions (Binomial, Normal, and Poisson)

Topic IV Sampling Techniques

1. Fundamentals of Sampling, Estimation, Statistical Inference,
2. Chi-Square Test, F-Distribution, ANOVA, Association of Attributes, Non-Parametric Tests

Topic V Index Numbers and Time Series

1. Introduction to index numbers, construction of indices.
2. different forms of indices Introduction to time series

Recommended Books:

1. Comprehensive Statistical Methods - Arora, P.N.; Arora, Sumeet; Arora,
2. Statistical Methods – S. P. Gupta
3. Statistical Methods – S. C. Gupta

Year- II

EC-201 Economics of Growth and Development

Topic I Development and Underdevelopment: An Overview

1. The relevance of economic development. Problems in defining economic development
2. Economic growth in historical perspective: Marx, Schumpeter, Gerschenkron
3. Characteristics of LDCs - structural view of underdevelopment
4. The world distribution of income. Development gap.
5. Per capita income as an index of development. Difficulties of measurement and comparability problems involved in the calculation of per capita according to exchange rate and purchasing power parity
6. Alternative measures of development gap - HDI

Topic II Poverty and Inequality

1. Poverty and income distribution. Defining poverty and problems of measurement.
2. Income inequality, measurements of inequality.
3. Understanding inequality in the developed and underdeveloped worlds. Impact of inequality on the process of development.

Topic III Theories of Economic Growth and Development

1. The Harrod-Domar growth model and its application to LDCs
2. Solow's model of economic growth - The production function approach to the study of causes of growth
3. The Cobb- Douglas Production function - Embodied and disembodied technical progress
4. Surplus labour (Lewis), big push (Rosenstein-Rodan) , Balanced growth (Nurkse) , Unbalanced growth (Hirshman) - The process of cumulative causation (Myrdal), the center and periphery hypothesis - the dependency school
5. New Endogenous growth models- Intellectual capital: role of learning, education and research; AK model — Explanations of cross country differentials in economic growth

Topic IV Population growth and economic development

1. Population - basic concepts –
2. the theory of demographic transition - age structures of population
3. Migration - Rural and Urban migrations -The Harris - Todaro Model - problems of urbanization
4. Employment markets - Formal and informal employments - wage rates

Recommended Books

1. Debraj Ray (1998)- development Economics - Latest edition
2. Meier G. and J. Rauch (2004) - leading Issues in Development Economics 7th edition, Oxford University Press
3. Thirlwall A P.- Growth and Development (6th or 7th edition)
4. Basu, K. (2003), Analytical Development Economics: The Less Developed Economy Revisited, The MIT press.
5. Bardhan,P. and C. Udry (eds) (2000), 1st edition, Readings in Development Economics, The MIT Press

Year -II
EC-202 Research Methodology for Economics

Topic I Meaning of Research

1. Meaning of research in Economics.
2. Types of research (descriptive vs. analytical, fundamental vs. applied, qualitative vs. quantitative, conceptual vs. empirical, empirical vs. simulation based, conclusion oriented vs. decision-oriented, historical vs. a-historical.)
3. Importance and utility of Social Science research, Limitations of and difficulties in Social Science research.

Topic II Research Design

1. Stages involved in designing research -Conceptualizing the research topic.
2. Identifying and formulating the objectives.
3. Understanding the role played by methodology.

Topic III Research Methods and Techniques

1. Research methods and techniques- differences among them, the logical framework of investigation, the nature of problem and appropriate methodology.
2. Macro-level vs. Micro level research.
3. Data Collection, Sources of Data,
4. Primary Data, Surveys, Interviews, Questionnaires, personal interviews, group interviews, small group studies, Schedule, Observation, participant or nonparticipant observation.
5. Secondary data - Collection of Secondary data
6. Case studies.
7. Experimental Method in Social Sciences.

Topic IV Analysis of Data

1. Examination of the collected data - (primary or secondary)
2. Classification and Tabulation, Bi-variate presentation.
3. Graphs and Diagrams
4. Measures of Central Tendencies. Dispersion, Correlation
5. Hypothesis Testing - Definition and Formulation

Topic V Research Report Writing

1. Stages of report writing - survey of literature, development of working hypotheses, preparation of research design, collection of information, processing of collected information, hypothesis testing, interpretation and generalization,
2. Report writing, references and bibliography.
3. Presentation - Power Point

Recommended Books

1. Guthrie Gerard (2010): Basic Research Methods: An Entry to Social Science Research, sage Publications, New Delhi.
2. Kothari C.R.(2004) : Research Methodology: Methods and Technique, New Age International Publishers.
3. Kumar Ranjit (2014): Research Methodology: A Step By Step Guide for Beginners, Sage Publications, New Dehli.
4. Krishnaswamy K N. and M. Ranganathan (2005): Methodology of Research in Social Sciences, Himalaya Publishing House.

Year- II

EC- 203 Methods of Econometrics

Topic I The nature of regression analysis

1. Two variable Regression model: Concept of PRF, Meaning of Linear Stochastic specification of PRF
2. Significance of the Stochastic Disturbance Term

Topic II Two variable regressions

1. Estimation through OLS-Assumptions, Estimators and their Properties, Gauss-Markov Theorem, coefficient of determination,
2. Two Variable Regression: Interval Estimation and hypothesis Testing-Normality Assumption and Properties of OLS Estimators under Normality Assumption,
3. Confidence Interval and Test of Significance Approach for Regression Coefficients, Analysis of Variance, Extensions of Two Variable Linear Regression Model - Regression through the Origin, Functional Forms

Topic III Multiple Regression Analysis

1. Problem of Estimation, Meaning of Partial Regression Coefficients, Adjusted R Square, Partial Correlation Coefficients, Problem of Inference,
2. Hypothesis testing, Uses of F test, Relaxing the Assumption of the OLS Multicollinearity and Consequences, Detection through Graphical Method, Spearman's rank Correlation Method, Goldfeld-Quandt Test, White's test-remedial measures, Autocorrelation.
3. Nature of the Problem, BLUE Estimator in the Presence of Autocorrelation, Consequences, Detection of the Problem through Graphical Method and Durbin-Watson d test, Remedial Measures

Topic IV Regression on Dummy Variables

1. Nature of Dummy Variables, Regression on Quantitative and Qualitative Variables,
2. Testing for Structural Stability, Interaction Effects, Use of Dummy variables in Seasonal Analysis,
3. Use of dummy variables in combining Time series and Cross Sectional Data

Topic V Simultaneous Equation Models

1. Examples, Simultaneous Equation bias, Problem of Identification Definition and Rules for Identification
2. Estimation of Simultaneous Equation models Recursive Models, Indirect Least Squares Two stage Least Squares

Topic VI Introduction to Time Series

1. Autoregressive and Distributed Lag Models, Stationary and Non-Stationary Process,
2. Concept of Unit Root Process and Testing, Transforming Non-Stationary Time Series,
3. Introduction to Forecasting using Time Series, Vector Autoregressive Model

Recommended Books

1. Basic Econometrics - Damodar Gujarati
2. Introductory Econometrics A Modern Approach - Jeffrey Wooldridge
3. Theory of Econometrics - A Koutsoyinnis
4. Introduction to Econometrics - G. S Maddala
5. Econometric Methods - G S Maddala

Year- II

EC- 204 Banking and Financial Institutions

Topic I Introduction

1. Overview of Financial System, Function of Financial Markets-role of Financing Intermediaries, Aspects of risk sharing, transaction costs, information costs, diversification and conflict of interests.

Topic II Banking system in India

1. Structure of Banking System in India, Central Banking – Reserve Bank of India Functions & Role, Role of RBI in currency Management. Reserve Management and Liquidity Management in the post Liberalization period, Monetary Policy of RBI since 1991.

Topic III Commercial Banking

1. Public Sector Banks- Nationalization of Banks – progress and problems post-nationalization,
2. Private Sector Banks – Old Private Banks in India, Progress & Problems: Guidelines for New Private Banks, Emergence, Progress & Problems.
3. Regional Rural Banks- Progress & Problems, Role of RRBs in Post reform period (1991)
4. Introduction of Local Area Banks Cooperative Banking – Progress & Problems of Cooperative Banking, Policy for Urban Cooperative Banks.

Topic IV Banking sector Reforms after 1991

1. Committee on Indian Financial System 1991 & 1998
2. Objectives of Financial Reforms, Reforms in the Indian Banking Sector since 1991.

Topic V Non - Banking Financial Institutions

1. Definition of NBFC – RBI Classification of NBFCs. Non- banking Institutions-small savings, Pension Funds, Mutual Funds, Insurance Companies-Meaning & Features,
2. Regulations of NBFCs in India, Performance of NBFCs in India (since 1985) – Number, Size, volume and structure of deposits.

Recommended Books

1. Bhole L. M. (2004) “Financial Institutions and Markets Structure, Growth and Innovations” Tata McGraw Hill Publishing Company Ltd. New Delhi

2. Bhasin, Niti (2006) "Banking Developments in India 1947 to 2007" New Century Publications.
3. Frederic Mishkin and Stanley Eakins (2006) "Financial Markets and institutions", Pearson 5th Ed.
4. Kohn Meir "Financial Institutions and markets" Tata McGraw Hill
5. Tannan M L (2010) "Banking Law and Practice in India" Lexis – Nexis India

Reports

1. Report on Trend & Progress of Banking - RBI Annual Reports
2. Report on Currency & Finance – RBI Publication
3. Report of the Committee on Financial Inclusion, 2008
4. Report of the Committee on Financial Sector Reforms (Raghuram Rajan Committee)
5. Report (2009) (A Hundred Small Steps by Sage Publication)

Year -II

EC- 205 Institutional Economics

Topic I Institutions

1. What are Institutions?
2. Social, Political, Cultural and Economic Institutions
3. What do the Institutions do?

Topic II What is Institutional Economics?

1. What does it try to do? The need for Institutional economics
2. Old Institutionalism and New Institutionalism, Challenges posed to Neo-Classical economics
3. Transactions Costs and Imperfect Information
4. Economies of Scale and Division of Labour

Topic III Institutions as a Fundamental Cause of Long Run Growth vs. High Growth leading to better Institutions- Empirical evidence.

Topic IV Interface between Institutional economics and Development economics

1. Institutions as a constraint for developing economies

Topic V How do institutions develop/change?

1. How and why do 'good' institutions not develop?
2. Which institutions matter?
3. How to get 'good' institutions? What should be the institutional agenda for developing economies? Debate between the two schools of thought
4. What are the 'right' institutions for a developing economy? Bardhan's perspective on persistence of socially suboptimal institutions
5. Why poor nations remain poor?

Topic V Violence and Social Orders

1. Open Access Order and Limited Access Order

Recommended Books

1. North, Douglas 1990. Institutions, Institutional Change and Economic Performance, Cambridge University Press
2. North D 1991. Institutions, Journal of Economic Perspectives, Vol. 5, No. 1, pp 97-112.
3. North, Douglas 1993. The New Institutional Economics and Development, Washington University.

4. Williamson O 2000. New Institutional Economics, Taking Stock, Looking Ahead, Journal of Economic Literature Vol. 38, pp 595-613.
5. Acemoglu, D and Johnson, S. James Robinson 2004. Institutions as a Fundamental Cause of Long Run Growth, in Handbook of Economic Growth, eds by P. Aghinon and S.Durlauf
6. Bardhan P.K 1989 The New Institutional Economics and Development Theory: A Brief Critical Assessment, World Development, Vol. 17, No.9 pp. 1389-1395
7. Bardhan P.K 2000 Understanding Underdevelopment : Challenges for Institutional Economics from the Point of View of Poor Countries, Journal of Institutional and Theoretical Economics, March, Vol. 156, No. 1, pp 216-235.
8. Bardhan P.K 2005. Institutions Matter, But Which Ones? Economics of Transition, Vol. 13, No. 3, 2005, pp 499-532.
9. North D , Wallis, J.J Weingest, B.R 2009 Violence and Social Orders : A Conceptual Framework for Interpreting Recorded Human History, New York, Cambridge University Press.
10. North D , Wallis, J.J, Webb S.B , Weingest, B.R 2013 In the Shadow of Violence: Politics, Economics, and the Problems of Development, New York, Cambridge University Press.
11. Acemoglu , D and Johnson, James 2012 Why Nations Fail: The Origins of Power, Prosperity and Poverty , Great Britain, Profile Books.

Year- II

EC-206 Economics of Discrimination

Topic I Introduction, History and Economic Modeling

1. Introduction to Economics of Discrimination
2. Historical perspective on Discrimination
3. Causes and forms of Economic Discrimination
4. Economic models of Discrimination- Competitive and collective models, Overcrowding model, The Human capital Model

Topic II Inequality, Social Exclusion and Theories of Discrimination

1. Concept of Inequality- Group-based Inequality and Inter-personal Inequality
2. Social Exclusion: Concepts and types
3. Theories on Discrimination:
 - i. Gary Becker (Test for Discrimination)
 - ii. Kenneth Arrow (Belief Theory of Discrimination)
 - iii. George Akerlof (Identity theory of Discrimination)
 - iv. Herbert Blumer's theory of discrimination
4. Caste based Exclusion and Discrimination- Ambedkar's approach towards economics of Caste, and Untouchability, Gandhian views of Economic dimension of Caste system.

Topic III Market based Discrimination

1. Market discrimination- Discrimination in Factor Market
2. Input Market- Land Market, Labour Market, Gender, Occupation, and Agricultural Inputs
3. Discrimination in Commodity market-Discrimination in imperfect market
4. Econometrics models of labour market discrimination

Topic IV Public Policies to overcome Economic Discrimination and Experiences

1. Empowerment Policies,
1. Reservation policy or Affirmative Action Policies,
2. Land Policies, and
3. Experiences of USA, India, and South Africa

Recommended Books and Articles

1. Chakravarti, Achin (2001). Concept and Measurement of Group Inequality, Centre for Development Studies, working paper no. 315, May

2. Akerlof, George (1976). The Economics of caste and of the Rat Race and other woeful tales, *Quarterly Journal of Economics*, Vol. 90
3. Akerlof, George and Rachel Kranton (2010): Identity Economics: How Our Identities Shaped Our Work, Wages and Well-being: Princeton University Press, New Jersey.
4. Arrow, Kenneth (1972), Models of Job Discrimination in A.H. Pascall, ed., Racial Discrimination in Economic Life, D.C. Heath publishers, Lexington MA.
5. Arrow, Kenneth (1973). The Theory of Discrimination in the labour market, Orley Albert Rees (ed), Princeton: Princeton University Press
6. Becker, Gary (1956): The Economics of Discrimination, Chicago: University of Chicago Press.
7. Blank, R. M., M. Dabady, C.F. Citro (2004), Measuring Racial Discrimination, National Research Council Panel on Methods for Assessing Discrimination, National Academies press, Washington D.C
8. Blumer, Herbert (1958). Race prejudice as a sense of group position, *Pacific Sociological Review*, Spring, Vol 1, P.3
9. Borooah, V.K., N.S. Sabharwal, D.G. Diwakar, V.K. Mishra, A.K. Naik. (2015). Caste, Discrimination, and Exclusion in Modern India: Sage Publication.
10. Cowell, Frank A (2016). How much inequality we can explain A Methodology and an application to the Topiced States, *Economic Journal* Vol 105,
11. Dan A. Black (1995), "Discrimination in an Equilibrium Search Model", *Journal of Labour Economics*, vol.13, no.2, April.
12. Darity, William and Ashwini Deshpande (2003), *Boundaries of Clan and Color*, Routledge, New York.
13. Darity, William, and Darrick Hamilton. 2012. *Bold Policies for Economic Justice*. Springer
14. Desai, S and Amaresh Dubey (2011): "Caste in 21st Century India: Competing Narratives", *Economic and Political Weekly*, Vol 46(11), pp 40-49.
15. Deshpande Ashwini. 2011. *The Grammar of Caste: Economic Discrimination in Contemporary India*. Oxford publication
16. Deshpande, Ashwini (2005), Do Market Discriminate? Some Insights from Economic Theories, pp.59-65 in Thorat, Aryama, and Negi, eds., *Reservation and Private Sector: Quest for Equal Opportunity and Growth*, Rawat Publishers, New Delhi.
17. Deshpande, Ashwini and Thomas Weisskopf (2010): "Does Affirmative Action Affect Productivity in the Indian Railways?," Working Paper No 185, Centre for Development Economics, Delhi School of Economics, Delhi.
18. HAAN, De, Arjan (1999) *Social Exclusion: Towards and holistic understanding of deprivation*. Social Development Dept. Dept. of International Development.
19. Hills, John, Julian Le Grand, and David Piachaud (2002), *Understanding Social Exclusion*, Oxford University Press, New York.
20. Holzer, Harry (1999), *What Employers Want: Job Prospects for Less-Educated*

Workers, Russell Sage, New York.

21. Jodhka, S.S. *Caste: A Short Introduction*, Oxford University Press, 2013
22. Killick, Tony (2002). *Responding to Inequality*, Inequality Briefing, Briefing Papers No. 3 (3 of 3), Overseas Develop Institute.
23. Lackshmanasamy, T. and S. Madheswaran (1995), *Caste Discrimination: Evidence from Indian Scientific and Technical Labour Market*, Indian Journal of Social Sciences, Vol. 8, No. 1, Pp.59-77.
24. Lareau, Annette (2003), *Unequal Childhoods: Race, Class, and Family Life*, University of California Press, Berkeley CA.
25. Madheswaran, S. (2008). *Is Affirmative Action Policy for Private Sector Necessary?* *Indian Journal of Industrial Relations: Economics & Social Dev.*, 44(2), 164-184.
26. Marc Fosset and Scot J South (2016). *Measurement of intergroup income inequality: A Conceptual review*, Social Force, vol. 61,
27. Massey, Douglas and Nancy Denton (1993), *American Apartheid: Segregation and the Making of the Underclass*, Harvard University Press, Cambridge MA.
28. Mckay Andrew (2002). *Defining and Measuring inequality*, Inequality Briefing, Briefing Papers No. 1 (1 of 3), Overseas Develop Institute
29. Mendelsohn, Oliver and Marika Vicziany (1998), *The Untouchables: Subordination, poverty, and the state in modern India*, Cambridge University Press, Cambridge UK.
30. Michael Sattinger (1996): "Search and Discrimination", *Labour Economics*, 3(2).
31. Mohanty, B.B (2001), "Land Distribution among Scheduled Castes and Tribes", *EPW*.
32. Nancharaiah,G.(1984), *Land and Cast*, Himalaya Publications, Bombay.
33. Naschold, Felix (2002). *Why inequality Matters for Poverty*, Inequality Briefing, Briefing Papers No. 2 (2 of 3), Overseas Develop Institute
34. Nesiah Devanesan (1997). *Discrimination with Reason*, Oxford University Press, Delhi.
35. Piketty, Thomas (2015) *Economics of inequality*, Harward UniversityPress , *Handbook of Income Distribution*, Volume 1, 2000, Pages 429-476
36. Prakash, Aseem (2015): *Dalit Capital: State, Market and Civil Society in Urban India*: Routledge, Delhi.
37. Quillian, Lincoln (2006), *New Approaches to Understanding Racial Prejudice and Discrimination*, *Annual Review of Sociology*, 23:299-328.
38. Randive, B.T (1997), "Caste, Class and Property Relations", *EPW*, February.
39. Ravillion, M and S Chen (2003): "Measuring Pro-poor Growth", *Economic Letters*, 78(1).
40. Scoville, James (1991), *Towards a Formal Model of a Caste Economy in Status Influences in Third World Labour Markets: Caste, Gender, Custom*, De Gruyter, New York.
41. Scoville, James (1996), *Labour Market underpinnings of a caste economy*, *The*

- American Journal of Economics and Sociology*, 55(4).
42. Sen Amartya (1997). From income inequality to Economic inequality, *Economic Journal*, Vol. 64.
 43. Sen, A. (2000). Social Exclusion: Concept, Application and Scrutiny', Social Development Papers No. 1. Office of the Environment and Social Development, Asian Development Bank.
 44. Sen, A.K. (1995), Inequality Re-examined, Oxford University Press
 45. Sen, A.K.(1990): Gender and Cooperative Conflicts' in Tinker(Ed) Persistent Inequalities: Women and World Development, Oxford University Press, New York.
 46. Silver, Hillary and Wilkinson, F (1995), Policies to combat Social Exclusion: A French British Comparison, Geneva: ILS, Discussion Papers, Series No. 83
 47. Solomon W. Polachek and W. Stanley Siebert (1993): "The Economics of Earnings", Cambridge University Press, USA.
 48. Thorat S.K, N. Tagade, A.K. Naik (2016). Prejudice against Reservation Policies: How and Why?, *Economic and Political Weekly*, Vol. LI, No 8, Feb 20.
 49. Thorat, S. and K. Newman (2010). Blocked by Caste: Economic Discrimination in Modern India (eds.). Oxford University Press. New Delhi. 2010. Pp. 287-310
 50. Thorat, S.K and Joel Lee (2006), "Dalits and the Right to Food-discrimination and Exclusion in food-related Government Programmes", IIDS, Working paper, November, 3.
 51. Thorat, S.K. (2001). Caste Untouchability and Economic and Market Discrimination: Theory, Concept and Consequences, Artha Vigyana, Journal of Gokhale Institute of Politics and Economics. Vol. XLIII, Nos. 1-2
 52. Thorat, S.K. (2004), Caste System in India: Social and Economic Exclusion and Poverty, Indian Institute of Dalit Studies, New Delhi.
 53. Thorat, S.K. (2005). Caste, Social Exclusion and Poverty Linkages: Concept, Measurement and Empirical Evidences, IIDS Working Paper.
 54. Thorat, S.K. and Umakant (2004), Caste, Race, and Discrimination: Discourses in International Context, Rawat Publications, New Delhi.
 55. Thorat, S.K., Aryama, and Prasant Negi (2005), Reservation and Private Sector: Quest for Equal Opportunity and Growth, Rawat Publications, New Delhi.
 56. Thorat, Sukhadeo, M Mahamallick and Nidhi Sadana Nidhi (2010): "Caste System and Pattern of Discrimination in Rural Markets", in Sukadeo Thorat and Katherine Newman (ed.), Blocked By Caste - Economic Discrimination in Modern India (New Delhi: Oxford University Press) .
 57. Thurow, Lester (1969), Poverty and Discrimination, Browking Institution, Washington, Chapter VII.
 58. Weber, Max (1968), Economy and Society. (Edited by Guenther Roth and Claus Wittich) Bedminister Press, New York.
 59. William Darity, Jr. (1995). Economics and Discrimination. Vol-I & II, Edward Elgar Publication.

60. William M. Rodgers (2009): Handbook on the Economics of Discrimination, Edward Elgar publishing.
61. Xaxa, V (2001), "Protective Discrimination: Why Scheduled Tribes lag behind Scheduled Castes?", Economic and Political Weekly, July 21.

Year- II
EC- 207 National Income Accounting

Topic I Concept of National Product

1. Concept of Production. Production exchanged in the market, Self Consumed Produce, Services of Housewives, Owner Occupied Dwellings, and Consumer durables.
2. Concept of value added by production. Distinction between intermediate and final product. Problem of deducting for intermediate products.
3. Distinction between Value added from a particular sector and the final product available from the sector.
4. Gross and Net Production: Netting for depreciation
5. Domestic Product and National Product at Market Prices and Factor costs
6. Disposable Income and Personal Income.

Topic II Treatment of Special Sectors

1. Valuing the Product of / Treatment of Government sector
2. Valuing the Product of /Treatment Financial Intermediaries
3. Valuing the Product- Rest of the World.
4. Accounts for the producing sector, Consuming Sector, the government sector and the Rest of World.

Topic III Methods of Income Estimation

1. The Product Method
2. The Income Method
3. The Expenditure Method
4. The Equivalence of the three methods.

Topic IV Accounts for Different Sectors

1. Accounts for the producing sector
2. Accounts for the Consuming Sector
3. Accounts for the government sector
4. Accounts for the Rest of World

Topic V Related Topics

1. The United Nations System of National Accounts.
2. National Income at Current and Constant Prices.
3. Green GDP
4. National Account Statistics of India. An Introduction.

Recommended Book

1. Beckerman, Wilfred (1968): An Introduction to National Income Analysis, Weidenfeld and Nicolson, London.
2. Uma Dutt Roy Choudhury (2000): National Income Accounting, MacMillan Publishers, India.
3. Paul Studentski (1961): The Income of Nations, New York university press.
4. CSO Government of India (2012): National Accounts Statistics: Sources and Methods.
5. United Nations: The System of National Accounts