

COURSE STRUCTURE FOR PG IN ECONOMICS

Semester	Course Code	Name of the paper	Credit	
Sem-I	ECO-1	Advanced Microeconomics	5	
	ECO-2	Research Methodology and Ethics	5	
	ECO-3	Advanced Mathematical Economics	5	
	ECO-4	Public Economics	5	
		Total	20	
Sem-II	ECO-5	Advanced Macroeconomics	5	
	ECO-6	Development Economics	5	
	ECO-7	International Trade and Finance	5	
	ECO-8	Advanced Statistical Method	5	
		Total	20	
Students who exit at the end of 1 st Year shall be awarded PG Diploma			.	
Course offered to regular students (Two years) and one year M.A programme				
Sem-III	ECO-9	Environmental Economics	5	
	ECO-10	Indian Economic Policy	5	
	ECO - 11	Students can opt for one paper		
		A. Agricultural Economics	5	
		B. History of Economic thought		
		C. Gender and development Economics		
		D. Behavioral Economics		
	ECO – 12	Students can opt for one paper		
		A. Industrial Economics	5	
		B. Advanced Econometric Methods and Applications		
		C. Financial Institutions and Markets		
		D. Labour Economics		
	Total		20	
Sem-IV				
	ECO - 13	A. Research	18	
		B. Internship	2	
Total			20	
Overall Credits			80	

Note: 1. Students are required to take SWAYAM course of 5 credits during the M.A programme.

SEMESTER I

ADVANCED MICROECONOMICS

Course Code: ECO - 1

Credit: 5

UNIT I: Pricing Theories

Oligopoly: Stackelberg, Cartel and Merger, Price leaderships and Basing point price system models. Input market: Monopsony and Discriminating Monopsony, Bilateral Monopoly.

UNIT II: Managerial and Behavioural Theories

Critical evaluation of managerial analysis, Baumol's sales revenue maximization model. Williamson's model of managerial discretion, Marris model of managerial enterprises, Cyert and March behavioural model of the firm. Hall and Hitch full cost pricing principle, Limit Pricing Principle: Contribution of Bain, Sylos- Labini and Modigliani.

UNIT III: Theories of Distribution

Marginal Productivity theory, Product Exhaustion Theory-Euler and Clark-Wicksteed- Walrus. Macro Theories of Distribution: Ricardo, Marx, Kalecki, Kaldor and Pasinetti

UNIT IV: Welfare Economics

Pigovian welfare economics, Pareto optimal conditions, Value judgment, Samuelson-Bergson social Welfare function, Kaldor and Hicks compensation principle, Theory of second best, Arrow impossibility theorem, Rawl's Theory of Social Justice.

UNIT V: General Equilibrium

Partial and General equilibrium, Features of Market Equilibrium: Existence, Stability (Marshall and Walrasian conditions), Uniqueness, General equilibrium under uncertainty, Cob-Web models, Walras excess demand approach, Input-Output and Linear Programming approach to general equilibrium.

References

Archibald, G.C. (Ed.), Theory of Firm, Penguin, harmondsworth

Bain, J. (1958), Barriers to New Competition, Harvard University Press. Harvard.

Baumol, W.J. (1982), Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi.

Borch, K.H. (1968), The Economics of Uncertainty, Princeton University Press, Princeton.

Broadway, R.W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, London.

Da Costa, G. C. (1980), Production, Prices and Distribution, Tata McGraw Hill, New Delhi.

Healthfields and Wibe (1987), An Introduction to Cost and Production Functions, Macmillan, London.

Diamond and Rothschild (Eds.) (1978), Uncertainty in Economics, Academic Press New York Economics, McGraw Hill, New York.

Graff, J. De. V. (1957), Theoretical Welfare Economics, Cambridge University Press, Cambridge.

Green H.A.G. (1971), Consumer Theory, Penguin, Harmondsworth.

H. Gravelle and R Rees (2008) Microeconomics (3rd ed) Pearson

Hansen, B. (1970), A Survey of General Equilibrium System. McGraw Hill, New York.

Henderson, J.M and Quandt, R. E. (1980), Microeconomic Theory: A Mathematical Approach,

Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.

Kerps, David M. (1990), A Course in macroeconomic Theory, Princeton University Press.Princeton.

Koutsoyiannis, A. (1979), Modem Microeconomics, Macmillan press, London.

Layard, P.R.G. and A.W. Waiters (1978), Microeconomic Theory, McGraw Hill. New York.

N. Gregory Mankiw (2015) Principles of Microeconomics (7th ed) Cengage India

Paul Krugman and Robin Wells (2024) Microeconomics (7th ed) Worth Publisher

Quirk, J. and R. Saposnik (1968), Introduction to General Equilibrium Theory and Welfare

Robert Pindyck and Daniel Rubinfeld (2017) Microeconomics (8th ed), Pearson

Sen.A. (1999). Microeconomics: Theory and Applications, Oxford university Press, New Delhi,

Stigler, G. (1996), Theory of price, Prentice Hall of India New Delhi.

Varian, H. (2000) Microeconomic Analysis, W.W. Norton, New York.

Walter Nicholson and Christopher Snyder (2017), Microeconomic Theory- Basic Principles and Extensions. (12th ed) Cengage India

RESEARCH METHODOLOGY AND ETHICS

Course Code: ECO - 2

Credit: 5

UNIT I: Research:

Meaning of research, Objectives and Types of Research, Significance of research, Research Process, Criteria of Good Research, Problems faced by the researcher.

UNIT II: Research Problem:

Meaning of Research Problem. Selecting the Problem, Necessity of Defining the Problem, Technique involved.

UNIT III: Research Design:

Meaning, Need for Research Design, Features of a good design, Important Concepts relating to Research Design, Different Research Designs.

UNIT IV: Data Collection and Sample Design:

Primary and Secondary data. Sample design, sampling and non-sampling errors, types of sampling designs.

UNIT V: Research and publication Ethics and publication misconduct.

Ethics. Ethics with respect to research. Publication ethics; definition and importance. Data manipulation and research Fraud: falsification, fabrication and plagiarism.

References

Kothari and Garg: Research Methodology; Methods and Techniques, Third Additions. New Age International Publishers 1990.

Bird, A. (2006). *Philosophy of Science*. Routledge.

MacIntyre, Alasdair (1967) *A Short History of Ethics*. London.

P. Chaddah, (2018) Ethics in Competitive Research: Do not get cooped; do not get plagiarized,

National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009). *On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition*. National Academies Press.

ADVANCED MATHEMATICAL ECONOMICS

Course Code: ECO - 3

Credit: 5

UNIT I: Financial Mathematics

Financial Mathematics: Interest rate (simple and compound). Net Present Value. Loan Repayment. Annuities and Sinking Fund. Relationship between Interest Rate and Price of Bonds.

UNIT II: Simultaneous Equations

Goods and Labour Market equilibrium. Price control and government intervention in various markets. Market equilibrium for substitute and complementary goods. Taxes, subsidies and their distribution. National income model – IS-LM.

UNIT III: Differentiation and its Application.

MR, AR, TR, MC, AC, TC. Elasticity of demand; point and Constant. Tax Yield. Production function (Law of diminishing returns). Returns to Scale. Profit Maximization. Comparative static effects of taxes. Unconstrained optimization with two variables.

UNIT IV: Matrix and Difference equation.

Application of matrix arithmetic, cramer's rule in market equilibrium and income determination. Input-Output analysis. Application of difference equation – homogeneous and non-homogeneous determination. Lagged income model. Cobweb and Harrod-Domar.

UNITV: Linear Programming and Game Theory

Linear programming - Basic concept; Formulation of linear programming problem - Its structure and variables; Solution of linear programming through graphic and simplex method. Formulation of the dual of a programme and its interpretation; Shadow prices and their uses; Concept of duality and statement of duality theorems; Concept of game; Strategies- Saddle point solution, mixed and value of game.

References

Michael Hoy et al Mathematics for Economics , PHI, New Delhi, 2004.

Mike Rosser Basic Mathematics for Economist, Routledge, New York 2003.

Teresa Bradley and Paul Patton Essential Mathematics for Economics and Business, , John Wiley and Sons, West Sussex 2002.

Adil H. Mouhammed Quantitative Methods for Business and Economics, PHI, New Delhi, 2003.

Taro Yamane, Mathematics for Economists, PHI, 1973.

N.D. Vohra Quantitative Techniques in Management, TMH.

Allen R.G.D. (1974), Mathematical Analysis for Economists, Macmillan Press, London.

Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics (3rd Edition), McGraw Hill, New Delhi.

Croxton, F.E., D.J. Cowden and S. Klein (1973), Applied General Statistics, Prentice Hall, New Delhi.

Gupta, S.C. and V.K. Kapoor (1983), Fundamentals of Applied Statistics, S. Chand and Sons, New Delhi.

Speigal, M.R. (1992), Theory and Problems of Statistics, McGraw Hill Book, London.

PUBLIC ECONOMICS

Course code: ECO-4

Credit: 5

UNIT I: Public Goods

Public economic policies- allocative, distributive and stabilization; Theory of public goods; Efficiency and externalities; Internalisation of externalities; Theory of second best.

UNIT II: Public choice

An economic theory of democracy; Arrow's impossibility theorem; Demand revealing schemes for public goods-contributions of Clark and Tiebout; Theory of club goods;

UNIT III: Public Expenditure and Taxation

Samuelson, Wagner and Wiseman-Peacock on public expenditure; Cost-Benefit analysis: Program budgeting; Allocative and distributive aspects of a tax; Tax neutrality; Benefit and ability to pay approach.

UNIT IV: Fiscal Policy

Theory of fiscal policy; Objectives of fiscal policy-full employment, anti-inflation, economic growth, redistribution of income and wealth, stabilisation; Interdependence of fiscal and monetary policies; Fiscal policy with special reference to Underdeveloped countries.

UNIT V: Indian Public Finance

Trends in public expenditure, and debt; Fiscal federalism in India; Criteria for transfer of resources; Centre -state financial relations; Problems of state's resources and indebtedness; Revenue of union, state and local bodies; Reports of fmance commission in India.

References

Misra, B (1997), Public Economics, Macmillan India Limited, New Delhi.

Cornes, R and T, Sandler (1986) The Theory of externalities Public Goods and Club goods and Club Goods, Cambridge University Press, Cambridge.

Cullis, J and P. Jones (1998) Public Finance and Public choice, Oxford University Press, New York.

Hyman, D.N The Economics of Government Activity.

Hyman, D.N (1990) Public Finance: A Contemporary Application of theory and practice, Dryden Press, Chicago.

Davie Bruce F. Duncombe Bruce, F (1972), Public Finance Holt, Rinehart and Winston

Mukherjee, S., A. Ghose and R.N.Nag, Analytical Public Finance. Public Economics-Public Choice-Public Policies. New Central Book Agency(P) Ltd. Kolkata.

Om Prakash, Public Economics. Theory and Practice. Vishal Publishing Co.Jalandhar.

Musgrave R.A and P.B, Musgrave (1976) Public Finance in Theory and Practice Mc Graw Hill.

Richard A Musgrave and Peggy B. Musgrave Public Finance in Theory and Practice. Mc Graw-Hill Companies

SEMESTER II
ADVANCED MACRO ECONOMICS

Course code: ECO – 5

Credit: 5

UNIT I: National Income and Supply of Money

Different forms of National Income Accounting - Social Accounting - Input-Output Accounting- Financial Intermediation - a mechanistic model of bank deposit determination; A behavioural model of money supply determination: A demand determined money supply process.

UNIT II: Neo-Classical and Keynesian Synthesis

Classical and Keynesian views on interest; Extension of IS-LM model with government sector (Tax and Its Multiplier and Government Expenditure and its Multiplier); Relative effectiveness of monetary and fiscal policies; Extension of IS-LM models with labour market and flexible prices.

UNIT III Investment Function and Open Economy

The accelerator and investment behaviour; Kalecki theory of Investment; Impact of inflation and Influence of policy measures on investment – The open economy Mundell- Fleming model- Small open economy under Floating exchange rate and fixed exchange rate, Monetary approach to balance of payments.

UNIT IV: Theory of Inflation

Classical, Keynesian and Monetarist approaches to inflation; Structuralist theory of inflation: Phillips curve analysis - Short run and long run Phillips curve; Friedman and Phelps - the natural rate of unemployment hypothesis; Non-accelerating inflation rate of unemployment (NAIRU), Tobin's modified Phillips curve; Adaptive expectations and rational expectations; Policies to control inflation

UNIT V Post-Keynesian Demand for Money

Post-Keynesian Approaches to Demand for Money. Patinkin Real balance Effect, Approaches of Baumol and Tobin; Friedman and the modern quantity theory: Efficient Market Hypothesis, Crises in Keynesian economics and the revival of monetarism.

References

- Ackley, G. (1978), Macroeconomics: Theory and Policy, Macmillan, New York.
- Blackhouse, R. and A. Salansi (Eds.) (2000), Macroeconomics and the Real World (2 Vols.), Oxford University Press, London.
- Branson, W.A. (1989), Macroeconomic Theory and Policy, (3rd Edition), Harper and Row, New York.
- Dornbusch, R. and F. Stanley (1999), Macroeconomics, Irwin McGraw Hill, Inc. New York, 7th Edition.
- Heijdra, B.J. and V.P. Fredericck (2001), Foundations of Modern Macroeconomics, Oxford University Press, New Delhi.
- Jha, R. (1991), Contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd., New Delhi.

Romer, D.L. (1996), Advanced Macroeconomics, McGraw Hill Company Ltd., New York.
Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications

DEVELOPMENT ECONOMICS

Course Code: ECO-6

Credit: 5.

UNIT I: Poverty, Inequality and Development

Concept and Measures of poverty: Head count ratio, Sen's Index, HPI and MPI; Inequality measures- Gini Coefficient and Lorenz Curve; Measure of development: PQLI, HDI, GDI, and GEM; Connections between inequality and development, Mechanisms that generate poverty traps and dependence path of growth processes.

UNIT II: Dualism and Economic Development

Dualism – geographic, social and technological, Myrdal's theory of cumulative causation The regional inequalities in the context of economic development, Inverted U relationship between spatial inequality and economic development; the centre periphery thesis

UNIT III: Financing Economic Development

Saving, capital formation and economic development; Financial sector and economic development; Micro credit and economic development; Taxation, public borrowing and economic development

UNIT IV: Sustainable Development

Development and Environment inter-linkage, Environment-Development Kuznet's U shape relationship, Economic activity and climate change, environmental externalities and state regulations of the environment, Concept of Green GDP and concepts of Sustainable development and SDGs

UNIT V: Globalization

Globalisation in historical perspective, the economics and the politics of multilateral agreements, trade, production patterns and world inequality; financial instability in the globalised world

References

- Debraj Ray, Development Economics, Oxford University Press, 2009.
- Partha Dasgupta, Economics, A Very Short Introduction, Oxford University Press, 2007.
- Abhijit Banerjee, Roland Benabou and Dilip Mookerjee, Understanding Poverty, Oxford University Press, 2006.
- Raghuram Rajan, Fault Lines: How Hidden Fractures Still Threaten the World Economy, 2010.
- Elinor Ostrom, Governing the Commons: The Evolution of Institutions for Collective Action, Cambridge University Press, 1990.
- Dani Rodrik, The Globalization Paradox: Why Global Markets, States and Democracy Can't Coexist, Oxford University Press, 2011.
- Michael D. Bordo, Alan M. Taylor and Jeffrey G. Williamson (ed.), Globalization in Historical Perspective, University of Chicago Press, 2003.

INTERNATIONAL TRADE AND FINANCE

Course Code: ECO-7

Credit:5

UNIT I: Theories of international Trade:

The pure theory of international trade : Law of Reciprocal Demand, Heckscher-Ohlin theory of trade, Leontief Paradox, Theorem of factor price equalization and Rybczynski theorem. Concept and policy implications of immiserizing growth.

UNIT II: Effects of Trade and Theory of Interventions.

Concepts of terms of trade; Hypothesis of secular deterioration of terms of trade and policy implications for less developed countries; Measurement of gains from trade and their distribution; Economic effects of Tariffs and Customs union (partial and general analysis).

UNIT III: Exchange Rate and Foreign Exchange Market.

Determination of Exchange Rates: Mint parity theory, the Purchasing power Parity Theory and balance of payment theory. Relative merits and demerits of fixed and flexible exchange rates. Foreign Exchange Market - Demand for and supply of Foreign exchange. Foreign Exchange markets - Spot and Forwards markets, Premium and discounts, Hedging, Speculation and Interest arbitrage.

UNIT IV: Balance of Payments adjustment

The process of adjustment under systems of fixed and flexible exchange rates; Expenditure-changing and expenditure-switching policies and direct controls adjustment: Policies for achieving internal and external equilibrium simultaneously under alternative exchange rate regimes. Foreign trade multiplier with and without foreign repercussions and determination of national income and output.

UNIT V: International Financial Institutions and Regional trading Blocks.

International financial institutions- International Monetary Fund, World Bank and Asian development Bank. Regional trading blocks- SAARC/SAFTA and ASEAN regions.

References

- Bhagwati, J (Ed.) (1981), International Trade, Selected Readings, Cambridge University Press Massachusetts.
- Kindleberger, C.P. (1973), International Economics, RD. Irwin, Homewood.
- King, P.G. (1995), International Economics and International Economic policy: A Reader, McGraw Hill International, Singapore.
- Krugman, P.R and M. Obstfeld (1994), International Economics: Theory and Policy, Glenview. Foresman.
- Salvatore, D, (1997), International Economics, Prentice Hall, Upper Saddle River, NJ., New York.
- Soderstrom, Bo (1991), International Economics, The Macmillan Press Ltd. London.
- Bhagwati, J (Ed.) (1981), International Trade, Selected Readings, Cambridge University Press

Massachusetts.

Mundell, R, (1968), International Economics, Macmillan Company ,New York.

Pomfert, R. (1996), International Trade: An Introduction to Theory and policy, Basil Blackwell. Oxford.

Mannur.H.G. (), International Economics

Vaish,M.C and S. Sudama (1998), International Economics, Oxford & IBH Publishing Co.Pvt. Ltd, New Delhi.

ADVANCED STATISTICAL METHODS

Course Code: ECO-8

Credit: 5.

UNIT I: Correlation and Regression Analysis

Correlation Analysis: Meaning, Assumptions, Utility, Correlation and Causation, Properties; Methods of Studying Correlation- Graphic methods and Algebraic methods, Coefficient of determination and probable error; Partial and Multiple correlations.

Regression Analysis: Meaning, Utility, Nature of regression lines, Methods of obtaining Regression Lines; Regression Equations, Regression Coefficients, Properties of Regression Coefficients; Partial and Multiple Regression.

UNIT II: Non-linear equations

Methods of estimation of non-linear equations, Parabolic Equation, Exponential Series, Geometric and Logarithmic series; Gompertz and Logistic relationships .

UNIT III: Probability and Probability Distributions

Probability Theory: Classical, relative and subjective probability, Addition and Multiplication Probability models, Conditional probability and Bayes theorem.

Probability Distributions: Binomial distribution: The characteristics and applications

Poisson distribution: The characteristics and applications.

Normal distribution: The characteristics and applications.

UNIT IV: Sampling and Sampling Method

Sampling and Sampling methods; Sampling and non-sampling errors, Law of large number and central limit theorem, Sampling Distributions and their characteristics.

UNIT V: Statistical Estimation and Hypothesis testing

Point and Interval estimation of population mean; Standard error of Estimate; proportion and variance, Statistical testing of hypothesis and errors; Large and small sampling tests- Z, t and F tests; Non-parametric Tests: Chi-square test; Sign test, Wilcoxon Signed- rank test, Kruskal-Walis test.

References

Levin and Rubin (2007). Statistics for Management. PHI publications. 7th edition.

Monga G. S. (1972), Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi.

SC Gupta (2011). Fundamentals of Statistics. Himalaya Publishing House. ISBN 978-93- 5024-595-8.

SP Gupta (2008). Statistical Methods. 31st Edition. Sultan Chand and Sons.

Veerachamy R. (2002), Quantitative Methods for Economists, New Ages international Publishers, Bangalore.

SEMESTER III
ENVIRONMENTAL ECONOMICS

Course code: ECO –9

Credit:5

UNIT I: Introduction

Environmental economics: meaning, definition, nature and scope and limitations. Economy and Environment linkages, and population and environment linkages.

UNIT II: Theories of externality

Pareto optimality and market failure in the presence of externalities, property rights and Coase Theorem, public goods and market failure.

UNIT III: Evolution and implementation of environmental policy

Evolution of environmental regulation in India, environmental legislation and policies in India. Market based Instruments for Pollution control (tax and subsidies, permit systems), Command and control policy versus market-based instruments.

UNIT IV: Environmental valuation methods and Applications

Total economic valuation of environmental goods, concept of Willingness to Pay (WTP) and Willingness to Accept (WTA). Stated preference methods and Revealed preference methods

UNIT V: Sustainable Development

Evolution, concept, definitions, indicators, measurements, perspective from Indian experience.

References

Roger Perman, Yue Ma, Michael Common, David Maddison and James McGilvray, “Natural Resource and Environmental Economics”, Pearson Education/Addison Wesley, 4th edition, 2011.

Charles Kolstad, “Intermediate Environmental Economics”, Oxford University Press, 2nd edition, 2010.

Robert N. Stavins (ed.), “Economics of the Environment: Selected Readings”, W.W. Norton, 6th edition, 2012.

Robert Solow , “An Almost Practical Step toward Sustainability,” Resources for the Future 40th anniversary lecture, 1992.

Kenneth Arrow et al. , “Are We Consuming Too Much?” Journal of Economic Perspectives, 18(3): 147-172, 2004.

IPCC (Inter-governmental Panel on Climate Change), Assessment Reports

INDIAN ECONOMIC POLICY

Course Code: ECO – 10

Credit: 5

UNIT I: Features of Indian Economy

Basic characteristics of Indian economy; Features of Indian population, rural-urban migration; Urbanization; poverty and inequality; unemployment; Infrastructure- development, issues and policies in financing infrastructure.

UNIT II: Agricultural Sector

Characteristics of Indian agriculture; Agricultural policy; Land utilization and cropping pattern; Land reforms; Agricultural prices and price policy; Agricultural marketing and ware housing; Issues of food security; Policy of sustainable agriculture; WTO and its impact on Indian agriculture

Unit III: Industrial and Banking Sectors and Indian Public Finance

Performance of Public and private industries in India; Industrial policies; Reforms of banking sector, Centre-State financial relations; Central Finance- Trends and issues (including central budget), State finances- features and Issues, fiscal policy of India; Recommendation of the Finance Commission (latest).

UNIT IV: Indian Planning, External sectors and Reforms

Economic Planning- Strategy. objectives, achievements and problems; Grass-root organizations or development Structure and direction of trade, Balance of payments; external and internal policies and reforms; MNCs and foreign capital in India; WTO and its impact on Indian economy; Issues of governance; Competitions and safety nets in Indian economy.

UNIT V: Economy of North Eastern Region of India

Development in NE economy: Growth of Agricultural and Industrial sector - problems and potentials. Shifting cultivation and its effects. Infrastructural Development (Physical and Social Infrastructure). Trends of state GSDP and Sector-Wise contribution (Occupational Structure). Tourism; Potentials and Challenges.

References

- Bardehan, P.K. (9th Ed) (1999), The Political Economy of Development in India, Oxford University press, New Delhi.
- Brahmananda, P.R and Y.R. Panchmukhi (Ed) (2001), Development Experience in the Indian Economy: Inter-State perspectives, Bookwell, Delhi.
- Government of India, Economic Survey, (Annual), Ministry of Finance, New Delhi.
- Reserve Bank of India, Report on Currency and Finance (Annual)
- Sen, R.K. and B. Chatterjee (2001), Indian Economy: Agenda for 21st Century, (Essay in honour of Pr of. Bramanda), Deep & Deep Pub., New Delhi.
- Byres,TJ (Ed) (1998), The Indian Economy: Major Debates since Independence. Oxford University Press, New Delhi.

AGRICULTURAL ECONOMICS

Course Code: ECO-11(A)

Credit:5

UNIT I: Agriculture and Rural Labour Market

Nature of agricultural and rural economics; Traditional agriculture and its modernization; Role of agriculture in economic development; Interdependence between agriculture and industry-some empirical evidence; Models of interaction between agriculture and the rest of the economy: Agricultural development- Rural labour supply; Mobility of labour and segmentation in labour markets; marginalization of rural labour.

UNIT II: Diversification of Rural Economic Activities

Livestock economics-Livestock resources and their productivity; Problems of marketing: white revolution: Fishery and poultry development; Forestry, horticulture and floriculture; Issues and problems in rural industrialization and development of agro-based industries. Regional Rural banks. Role of NABARD. Agricultural Problems and prospects of cooperative institutions.

UNIT III: Rural Infrastructure and Marketing

Use of land, water and energy; Rural transport, communication, banking, extension services, role. Modes and problems of rural electrification; Rural social infrastructure-education and health and information dissemination. Behaviour of agricultural prices-Cobweb model; Agriculture price policy- Food security in India- Regulated markets; marketed and marketable surplus.

UNIT IV: Agricultural production and productivity

Agricultural Production Theories- Farm Size productivity and Empirical evidences- Farm budgeting and cost concepts: Supply response of individual crops and aggregate supply; Resource use efficiency in traditional agriculture: technical change, labour absorption and gender issues in agricultural services.

UNIT V: Land Policy and External Sector

Principles of Land utilization; Land distribution-Structure and trends; land values and rent: land tenures and farming systems-Peasant, capitalist, collective and state farming, Tenancy and crop sharing-Forms, incidence and effects; land reform measures and performances and performance; Problems of marginal and Small farmers. Role of MNCs; globalization of Indian economy and problems and prospects of Indian agriculture; impact of WTO on Indian agriculture.

References

- Bhaduri, A. (1984), The Economic Structure of Backward Agriculture, Macmillan, New Delhi.
- Bhardwaj, K. (1974), Production Conditions in Indian Agriculture, Cambridge University press, Cambridge.
- Brahmananda, P.R. and Y.R. Panchumukhi, (Eds.) (1987), The Development Process of the Indian economy, Himalaya Publishing house, Bombay.

HISTORY OF ECONOMIC THOUGHT

Course Code: ECO- 11 (B)

Credit:5

UNIT I : Early Period:

History of economic thought and economic history. Methodological approaches to economic thought, importance of history of economic thoughts. Contributions of Plato and Aristotle.

UNIT II: Mercantilism and Physiocracy :

Factors responsible for the rise of Mercantilism and their main ideas. Contribution Hume and Cantillon. Factors responsible for the rise of Physiocracy. Contribution of Turgot and Quesnay

UNIT III: Classical Period

Features of classical economics- Adam Smith on value and economic growth, Ricardo on distribution and economic growth, Malthus theory of population and economic growth.

UNIT IV: New Classical:

Wicksell on General theory of capital. Marshall on value and Distribution. Weiser on theory of alternative costs and imputation

UNIT V: Modern Economics:

Keynes General theory of employment, interest and money; Friedman on money and consumption; Schumpeter on the role of entrepreneur and innovation.

References

- Blaug, M (1997), Economic Theory in Retrospect A history of thought from Adam Smith to J.M Keynes,(5th.Edition) , Cambridge University Press, Cambridge.
- Blackhouse, R(1985), A History of Modern Economic Analysis, Basil Blackwell Oxford.
- Schumpeter, J.A. (1954), History of Economic Analysis, Oxford University Press, Oxford
- Grey, A and A.E.Thompson (1980), The Development of Economic Doctrine,(2nd. Edition), Longman Group, London.
- R.R Paul (1979), History of Economic Thought, Kalyani Publishers, Ludhiana, New Delhi.

GENDER AND DEVELOPMENT ECONOMICS

Course Code: ECO-11 (C)

Credit:5

UNIT I: Gender and Economics: Introduction

Gender and feminisms - Economic methodology and feminist critiques

Development: Human development and gender - Construction of Human Development Index and Gender-related Development Index and criticisms.

UNIT II: Work and Employment

Types of work, work participation rates, labour force Participation rate, Female labour supply, Neo-classical theory -Models of allocation of time: Becker and Mincer, Segregation in labour market: Discrimination in work place, measures of discrimination, Differential employment - Household work and non-market work: Time Use Survey.

UNIT III: Agriculture and Resource Management

Gender and property rights: Theories, experiences in South Asia, India and Nagaland.

Boserup's thesis on gender and agricultural change and its criticisms, Technological change and female labour, The impact of Green Revolution

Gender, environment and development: Linkages - Gender issues in natural resource management.

UNIT IV: Health and Well-Being

Sex ratio, child sex ratio, son preference, differential mortality between sexes – Differential access to health care – Intra family distribution of food and nutrition - Women's autonomy, fertility and health status – Health and poverty.

UNIT V: Gender and Globalisation

Women under capitalism: Review of political economy

approaches - Structural adjustment and women - Gender, informalisation and flexible production - Review of gender and development policies: Role of international bodies, governments and civil society, institutions Mainstreaming gender concerns: Methods and approaches.

References

Dewan, Ritu, 'Gender in Neoclassical Economics: Conceptual Overview', *Economic and Political Weekly*, Vol 30, No 17, pp 46-48, 1995.

Elson, D., Theories of Development. Chapter 6 in *Gender and Development: Theoretical, Empirical and Practical Approaches*, Lourdes Beneria with Savitri Bisnath (eds.). Cheltenham U. K.: Edwin Elgar Publishing Limited. [first published in the Elgar companion to feminist economics in 1999], 2001.

Feber, Marianne A. and J A Nelson (Eds), *Beyond Economic Man: Feminist Theory and Economics*, University of Chicago Press, Chicago, 1993.

Nussbaum, Martha C., *Women and Human Development: The Capability Approach*, Kali for Women, New Delhi. (Introduction: Feminism and International Development), 2000.

Ostergaard, L., 'Gender' in L. Ostergaard (ed) *Gender and Development: A Practical Guide*, Routledge, London and New York, 1992.

Seth, M., *Women and Development: The Indian Experience*, Sage Publications, New Delhi, 2000.

Amsden, Alice H., 'Introduction' in Alice H. Amsden (ed), *The Economics of Women and Work*, St. Martin's Press, New York, pp 11-35, 1980.

Anker Richard, 'Theories of Occupational Segregation by Sex: An Overview', in M F Loutfi (Ed), *Women, Gender and Work: What's Equality and How do We Get there?* ILO, Rawat Publication, Jaipur, 2002.

Becker, Gary, 'A Theory of Allocation of Time', *The Economic Journal*, Vol 80, No. 200, pp 493-517, 1965.

Cain, Glen g, 'The Economic Analysis of Labour Market Discrimination: A Survey', in O Ashenfelter and R Layard (eds), *Handbook of Labour Economics*, Vol I, Elsevier Science Publishers, BV, 1986.

Hirway, I., 'Conceptual and Methodological Issues of Time Use Studies', *Proceedings of the International Seminar on Time Use Studies*, CSO, Government of India, New Delhi, 1999.

Jose, A V (Ed), *Limited Options: Women Workers in Rural India*. ARTEP, ILO, New Delhi, 1989.

Raju, Saraswati and Depica Bagchi (Eds), *Women and Work in South Asia: Regional Patterns and Perspectives*, Routledge, London and New York, 1993.

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BEHAVIOURAL ECONOMICS

Course Code: ECO-11 (D)

Credit: 5.

Unit I: Introduction to Behavioural Economics

Nature of Behavioural economics; Methodological approach; Origins of behavioural economics; Traditional Economic Theory and Assumptions, Neo-classical and behavioural approaches to studying economics, Limits of Rationality, Bounded Rationality.

Unit II: Foundations of Behavioural Economics

Values; Preferences and Choices; the standard model; Axioms, assumptions and definitions; The neuro scientific basis of utility Beliefs; Heuristics and Biases-Representativeness, Biases resulting from representativeness, Confirmation bias, Anchoring, Availability, Affect, Overconfidence, Exponential growth bias, other biases.

Unit III: Risk Preference and Time Preference

Introduction to Risk and Time Preferences; Choice with risk- Expected Utility, risk aversion, Insurance, Tax Evasion; Risk based assessment; The standard model; Probability estimation; Self-evaluation bias- Projection bias- Causes of irrationality Decision making under risk and uncertainty; Prospect theory; Reference points; Loss Aversion; Shape of utility function; Decision weighting Mental accounting; Nature and components of mental accounting.

Unit IV: Strategic interaction

Nature of behavioural game theory; mixed strategies; Bargaining; Social Preferences: Altruism, envy, fairness and justice; Intentions, reciprocity and trust; Limited strategic thinking.

Unit V: Behavioural insights for Public Policy

Role of government in shaping behaviour, designing good institutions: The tragedy of the commons, matching markets, behavioural economics and institution design; Behavioural insights for public policy, nudge and behaviour change; Fairness and distributional effects, Ethical considerations in behavioural public policy.

References

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INDUSTRIAL ECONOMICS

Course Code: ECO-12 (A)

Credit:5

UNIT I: Organisational form and Industrial efficiency

Types of organisational form and business motives. Industrial efficiency: Concepts and measurement

UNIT II: Market Structure, Conduct and Performance

Standard forms of market structure; Perfect competition, Monopoly, monopolistic competition and oligopoly. Market conduct and market performance.

UNIT III: Elements of market structure and market concentration

Diversification, Vertical integration and merger. Market concentration; measurement and performance.

UNIT IV: Pricing and Financial Ratios

Methods of pricing: Theoretical and pricing in practice. Analysis of Financial ratios.

UNIT V: Industrial Location and Investment Decision

Approaches to Industrial location. Investment decision; social- cost benefit analysis. Methods of project evaluation.

References

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ADVANCED ECONOMETRIC METHODS AND APPLICATIONS

Course Code: ECO-12 (B)

Credit:5

UNIT I: Simultaneous Equation Models

Nature of simultaneous-Equation Model, Simultaneous-Equation Bias: inconsistency of OLS estimators. The Identification Problem – under identified, just or exact identification, overidentification, Rules of Identification - Order and Rank conditions of identification.

Approaches to simultaneous-equation methods- Estimation, Recursive methods and OLS. Estimation of just identified equation - ILS, Estimation of over identified equation- 2SLS.

Unit II: Time Series Modelling

Stationary stochastic process – Random walk and white noise, Unit Root Stochastic Processes- Dickey-Fuller test and Augmented Dickey-Fuller test, Integrated Stochastic Processes, Spurious Regression, Cointegration, Engle-Granger test,

Approaches to Economic Forecasting- AR, MA and ARIMA (Autoregressive Integrated Moving Average), Box- Jenkins Methodology, Vector Autoregression (VAR), Problems with Var modelling.

Unit III: Panel Data Techniques

Introduction to panel data, Estimation of Panel Data Regression Models- Fixed Effects Model and Random Effects Model. Fixed versus Random Effects. Test of Simultaneity-Hausman Specification Test, Breusch and Pagan Test.

Unit IV: Modelling Volatility

Motivations: non-linearity - Models for volatility, Implied volatility models, exponentially weighted moving average models, Autoregressive volatility models, Autoregressive conditionally heteroscedastic (ARCH) models, Generalised ARCH (GARCH) models, Estimation of ARCH/GARCH models, Extensions to the basic GARCH model.

Unit V: Application of MS Excel/STATA/SPSS/ E-Views software.

Descriptive analysis-tabulation and graphical presentation, Use of cross-sectional data and Time-series data, Chi-square test, Correlational analysis, OLS - Two-variable Regression analysis, Multiple Regression Analysis, Testing of Hypothesis - T-Test and ANOVA, Multicollinearity Test, Heteroscedasticity Test, Autocorrelation - Durbin-Watson Test, Dickey Fuller Test (Unit Root Test), ARIMA modelling.

References

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FINANCIAL INSTITUTIONS AND MARKETS

Course Code: ECO-12 (C)

Credit:5

UNIT I: Regulatory and Promotional Institutions

Functions and role of Central Bank in developed and developing countries; Goals, targets and constraints of monetary policy; Instruments of monetary regulations; Trade-off in using different instruments of monetary regulations. SEBI: Organization, objectives and-functions; IRDA

UNIT- II: Banking Institutions

Functions and role of Commercial Banks; Bank Nationalisation: Rational and review, justification of nationalisation; Concept of credit creation; Resource base and portfolio management of Commercial Bank; Co-operative Banks and their structure.

UNIT III: Non- Bank Financial Institutions

Definition and Types of NBFIs: Role and Functions; its impact on monetary policy and measures taken to control their operations. Distinction between NBFIs and Commercial Banks. Development Banks: role and functions

UNIT IV: Financial Markets.

Role and Structure of Money and Capital Markets. Markets for Derivatives: Meaning, types and uses (Futures, options, swaps and warrants): Valuation of derivatives.

UNIT V: Issues and Evidence.

Defects of Indian Banking system. Suggestions to improve working. RBI Credit to Government and deficit financing: Role of domestic monetary policies in the context of global economic and financial integration. Recent financial sector Reforms-review of the Chakravarty and Narashimam Committee report.

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LABOUR ECONOMICS

Course Code: ECO-12 (D)

Credit:5

Unit I: Labour Markets.

Nature and characteristics of labour market in developing countries like India; Classical, neo-classical and dualistic economy; Demand for labour in relation to size and patterns of investment; Choice of technologies and labour policies; Supply of labour in relation to growth of labour force; Labour market policies; Mobility and productivity of labour; Methods of recruitment and placement; Employment service organization in India.

Unit II: Employment.

Employment and development relationship; Poverty and unemployment in developing countries; Unemployment: concept, types and measurement, particularly in India; Impact of rationalization: Technological change and modernization on employment in organized private industry; Public sector and employment in agriculture sector; Analysis of educated unemployed.

Unit III: Wage Determination.

Classical, neo-classical and bargaining theory of wage determination; Concept of minimum wage: Living wage and fair wage in theory and practice; Discrimination in labour markets; Wage determination in various sector-rural and urban. Organized and informal sectors; Inflation-wage relationship at micro and macro levels; Analysis of rigidity in labour markets; National wage policy; Wages and wage boards in India.

Unit IV: Industrial Relations.

Theories of labour movement: growth, pattern and structure of labour unions in India, achievement of labour union; Causes of industrial disputes and their settlement and prevention mechanism; Current trends in collective bargaining; Role of judicial activism: Labour legislation in India; Indian labour laws and practices in relation to international labour standards.

Unit V: State and Labour

State and social security of labour; Concept of social security and its evolution; Social assistance and social insurance: Review and appraisal of state policies with respect to social security and labour welfare in India; Special problems of labour: child labour, female labour, discrimination and gender bias in treatment of labour; Labour market reforms: exit policy, need for safety nets; Measures imparting flexibility in labour markets; National commission on labour; Globalisation and labour markets.

References

Papola, T.S., P.P. Gosh and A.N. Sharma (Eds) (1993), Labour, Employment and Industrial Relations in India, B.R. Publishing Corporation, New Delhi.

Jhabvala, R. and R.K. Subramanya (Eds.) (2000), The Unorganised Sector: Work

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