

COOCH BEHAR PANCHANAN BARMA UNIVERSITY

COURSE STRUCTURE & SYLLABUS

(Syllabus of Courses Effective from the Academic Year: 2020-2021)

CBCS Syllabus

For M.A. in Economics

Semester-I, II, III & IV



DEPARTMENT OF ECONOMICS

COOCH BEHAR PANCHANAN BARMA UNIVERSITY
COOCH BEHAR, WEST BENGAL

Vivekananda Street, Cooch Behar
West Bengal 736101

CBCS- COURSE STRUCTURE

Syllabus for M.A. in Economics

Course Structure and Distribution of Marks & Credits

SEMESTER-I

Paper Code	Title of the paper	Course Type	Duration of ESA (Hrs.)	Maximum Marks(100)/ each Paper				Credit
				Written	CE	Attendance	Total	
CC-1	Microeconomics	Core	3	75	20	5	100	5
CC-2	Macroeconomics	Core	3	75	20	5	100	5
CC-3	Mathematical Method for Economics	Core	3	75	20	5	100	5
CC-4	Public Economics	Core	3	75	20	5	100	5
TOTAL MARKS/ TOTAL CREDITS				300	80	20	400	20

SEMESTER-II

Paper Code	Title of the paper	Course Type	Duration of ESA (Hrs.)	Maximum Marks(100)/ each Paper				Credit
				Written	CE	Attendance	Total	
CC-5	Economic Growth and Development	Core	3	75	20	5	100	5
CC-6	Statistical Methods for Economics	Core	3	75	20	5	100	5
CC-7	Econometrics	Core	3	75	20	5	100	5
CC-8	<u>Part-I</u> Overview of Marketing Research	Core	2	40	20	5	100	5
	<u>Part-II</u> Market/ Industry Survey and G.D (Internal Examination)	Core	Internal	35				
TOTAL MARKS/ TOTAL CREDITS				300	80	20	400	20

SEMESTER-III

Paper Code	Title of the paper	Course Type	Duration of ESA (Hrs.)	Maximum Marks(100)/ each Paper				Credit
				Written	CE	Attendance	Total	
DCE-1	Agricultural Economics – I	Discipline Centric	3	75	20	5	100	5
DCE-2	International Trade and Finance -I	Discipline Centric	3	75	20	5	100	5
DCE-3	Regional Economics	Discipline Centric	3	75	20	5	100	5
GE-I	Foundation Course in Research Methods & Data Analysis	Generic Elective	3	75	20	5	100	5
TOTAL MARKS/ TOTAL CREDITS				300	80	20	300	20

SEMESTER-IV

Paper Code	Title of the paper	Course Type	Duration of ESA (Hrs.)	Maximum Marks(100)/ each Paper				Credit
				Written	CE	Attendance	Total	
DCE-4	Agricultural Economics – II	Discipline Centric	3	75	20	5	100	5
DCE-5	International Trade and Finance -II	Discipline Centric	3	75	20	5	100	5
DCE-6	Dissertation & Viva- Voce (Internal Examination)	Discipline Centric	Internal	75 (Report)	20 (Viva-voce)	5	100	5
GE-2	Indian Economic Development and Policy	Generic Elective	3	75	20	5	100	5
TOTAL MARKS/ TOTAL CREDITS				300	80	20	300	20

ESA: End of Semester Assessment

CE: Continuous Evaluation

Semester –I

Course Code: CC-1 **Microeconomics**

Objectives: The course is designed to impart theoretical and analytical knowledge to the students for understanding the economic behaviour of individuals, firms and markets. They will learn the various aspects of demand theory, theory of production, price and output determination and the choice under uncertainty and asymmetric information.

Unit-I: Preference Relations

Consumer Preferences, Utility for Computing , Indifference Curve, Utility function, Utility maximization, Interior and corner solution, Ordinary and compensated demand function, Composite Commodity Model, C-D preferences, Indirect Utility function, Roy's identity, Expenditure function. Properties Shephard's lemma, Estimating Utility Functions, Additively separable utility function, Quasi-linear utility function.

Unit-II: Production Function

Specification of technology, Input requirement set, Properties of technology – Monotonic, Convex and regular; CD, Homothetic production function, CES and Leontieff technology. Returns to scale and scale elasticity, Elasticity of factor substitution, Homogenous and Homothetic production function, and case of multiple products.

Unit-III: Models

Cost minimization model, Derived demand for inputs, properties of cost function, Shephard's lemma. Profit Maximisation – Factor demand and Output supply function, properties of profit function, Hotelling's lemma; Duality in production

Unit-IV: Market Structures

Perfect Competition; Profit maximization, Derivation of SS curves under external economies, tax and welfare implications; Monopoly, Welfare and Output, Quality choice; Discriminating Monopoly; Natural Monopoly; Monopsony; Oligopoly Models – Cournot, Bertrand, Stackelberg and Collusive Oligopoly. Normal-form representation, extensive-form representation, information sets, random moves, histories, pure strategies, relationship between extensive-form and normal-form, mixed strategies and behavioral strategies, Prisoner's Dilemma, definition of Nash Equilibrium (NE).

Unit-V: Social Choice and Welfare Economics

Pigouvian Welfare Economics, Pareto Optimality Conditions, Theorems of Welfare Economics, Kaldor-Hick's Criteria for Welfare Improvement, Market Imperfections and Market Failures – Decreasing Cost, Uncertainty, Non-existence of Market and Incomplete Markets.

Introduction to Social Choice, Value Judgment, Social Welfare Function, Arrow's Impossibility Theorem, Equity-Efficiency Trade-off.

Unit-VI: Introduction to General Equilibrium

Partial and general equilibrium; Walrasian excess demand and input- output approaches to general equilibrium, Existence, stability and uniqueness of partial equilibrium and general equilibrium.

Reading List

1. Andreu Mas-Colell, A., M. D. Whinston, and J. R. Green (1995), *Microeconomic Theory*, Oxford University Press.
2. Henderson, J.E. and R.E. Quandt (1988), *Microeconomic Theory - A Mathematical Approach*, McGraw Hill.
3. Koutsoyiannis, A. (1979), *Modern Micro Economics*, Macmillan Press, London.
4. Varian, H. (1992), *Micro Economic Analysis*, W. W. Norton & Company, Inc., New York.
5. Dominick Salvatoure: *Microeconomics Theory and Analysis*.
6. Schelling, T. (1960): *The Strategy of Conflict*, Cambridge Mass: Harvard University Press.
7. Sen, Anindya (1999): *Microeconomics: Theory and Applications*, OUP, Delhi.
8. Tirole Jean (1996): *The Theory of Industrial Organisation*, Prentice Hall of India Pvt. Ltd.
9. Jehle, G.A. and P.J. Reny, *Advanced Microeconomic Theory*, Addison Wesley, 2000.
10. Mas-Colell, A., M.D. Whinston and J.R. Green, *Microeconomic Theory*, Oxford University Press, 1995.
11. Varian, H. R., *Microeconomic Analysis*, W. W. Norton & Co, 3rd Revised edition, 1992.
12. E. Silberberg and W. Suen, *The Structure of Economics: A Mathematical Analysis*, 3rd Ed., Irwin/McGraw Hill.
13. Carl P. Simon and Lawrence E. Blume *Mathematics for Economists*, W.W. Norton & Company, 1994.
14. Arrow, K. J., *Social Choice and Individual Values*, John Wiley & Sons, Inc., 1963.
15. Koutsoyiannis, A. (1979), *Modern Microeconomics*, (2nd Edition), Macmillan Press, London.
16. Sen, A. (1999), *Microeconomics: Theory and Applications*, Oxford University Press, New Delhi.

Course Code: CC-2

Macroeconomics

Objectives: This course deals with economic behaviour at the aggregate level (GDP, inflation, unemployment, interest rates, deficits, trade balances, debt, financial crises, etc.). It is designed to equip the students with a framework that will be useful for understanding broad features of the behaviour of macroeconomic situation of an economy and related public policy issues for better decision making. It will enable the students to understand the macroeconomic environment of an economy.

Unit-I: Unemployment

The Natural Rate – Types of Unemployment – Full Employment – Costs of Unemployment. Wage rigidity- Generic Efficiency wage Model-General Version of Efficiency wage model- Shapiro-Stiglitz model.

Unit-II: Wage-Unemployment-Inflation Trade-off

Theories of Inflation – A Brief Review; Demand-pull, Cost-push, Monetary, and Structural Inflation; Stagflation; Costs of Inflation; Inflation-Proofing the economy.

Why are Wages sticky; The Phillips curve; Lipsey's theoretical rationale behind its existence; Role of Expectations; Adaptive expectation and rational expectation: Application in Cagan's model. Expectations Augmented Phillips Curve.

Inflation and interest rate- Fisher's equation, Tobin-Mundell Effect.

Short run Aggregate supply function- The Sticky Wage model, The Workers' Misperception model, The Imperfect Information model and the Sticky Price model.

Derivation of Expectation Augmented Phillips Curve from the Short run Aggregate supply function: Okun's law, Supply Shocks.

Unit-III: Demand for Money and Supply of Money

Keynesian Regressive Expectation model, Portfolio Balance Approach, A General Equilibrium Baumol-Tobin Model. Balance sheet of RBI- sources & components of High powered money, Balance sheet of Commercial Banks sources & components of money supply, Concepts of Money Multiplier.

Unit-IV: Traditional Dynamics of the Real Sector

The Trade cycle: Keynesian and Monetarist interpretations, Economic growth: The impact of capital accumulation and population growth, The Harrod growth model, The Solow neoclassical model, Cambridge criticisms of the aggregate production function.

Unit-V: Theories of Business Cycle

Business Cycle Theories of Schumpeter, Kaldor, Samuelson and Hicks; Control of business cycles –relative efficacy of monetary and fiscal policies, The Great Depression; Lags in the effects of policies; Expectations and Reactions; Uncertainty and Economic Policy.

Unit-VI: Open Economy Macroeconomics

Balance of Payments accounting; national product accounting; monetary accounting. Different Exchange rate regimes and Measures of exchange rate.

IS-LM model with goods trade: comparative statics results- Monetary policy, Fiscal policy, Exchange rate policy (Devaluation).

Extension to international capital market: perfect capital mobility under fixed exchange rate – Effectiveness of monetary and fiscal policy.

Extension to international capital market: perfect capital mobility under flexible exchange rate regime: The Mundell-Flemming Model.

Reading List

1. Mankiw N. Gregory (2010), "Macroeconomics" 7th Edition, Worth Publishers
2. Rudiger Dornbusch and Stanley Fischer "Macroeconomics", 2009, McGrawhill
3. Rosalind Levacic and Alexander Rebman "Macroeconomics", 1982, McMillan
4. Brian Snowdon and Howard R.Vane, *A Macroeconomics Reader*. Routledge
5. David Romer "Advanced Macroeconomics", 2006, McGrawhill
6. Brian Snowdon and Howard R.Vane. *Modern Macroeconomics Its Origins, Development. and Current State*. Edward Elgar Publishing, Inc.
7. Andrew Abel and Ben Bernanke "Macroeconomics", 2003, Pearson, Indian Ed
8. Richard T. Froyen "Macroeconomics", 2003, Pearson Indian Ed
9. Hallm R. and J.B. Tayl (1986) *Macroeconomics* W.W. N/ton, New York.
10. Jha, R. (1991): *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd. New Delhi.
11. Romer, D.L. (1996) *Advanced Macroeconomics*, McGraw Hill Company Ltd. New York.
12. Shapiro, E. (1996) *Macroeconomic Analysis*, Golgotha Publications, New Delhi.
13. Surrey, MJC (Ed) (1976) *Macroeconomic Themes*, Oxford University Press, Oxford.
14. Reddy, Y.V. (2000): *A Review of Monetary and Financial sector Reforms in India- Central Bank's Perspectives*, UBSPD, New Delhi.
15. Brahma P.R. (1980) *Growth less inflation by the means of stockless money*.
16. Gupta, S.B. (1982) *Monetary Planning in India*, Oxford Publication, New Delhi.
17. Keynes, J. M. (1936), *The General Theory of Employment, Interest and Money*. Macmillan, London.
18. Culbertson, J.M. (1971). *Macroeconomic Theory and Stabilization Policy*, McGraw Hill, London.
19. Samuelson, P.A. (1966). *The Collected Scientific Papers of Paul A. Samuelson*, Oxford and IBH Publishing Company, New Delhi.
20. D'Souza, E. (2e) (2009). *Macroeconomics*, Pearson Education.
21. Hamberg, Daniel (1971). *Models of Economic Growth*, Harper & Row Publishers, New York.
22. Heijdra, Ben J. and Frederick van der Ploeg. (2004). *Foundations of Modern Macroeconomics*, OUP, NY.

Course Code: CC-3

Mathematical Methods for Economics

Objectives: *It is designed to familiarize and train students with the basic mathematical concepts, tools and techniques that are commonly used in the exposition and analysis of economic problems. These mathematical methods would help students in their understanding of advance and core courses in economics.*

Unit I : Limits, Continuity & Differentiation

Concept of function and types of functions; limit, continuity and derivative; Rules of differentiation; Interpretation of revenue, cost, demand, supply functions; Elasticities and their types; Multivariable functions; Concept and types of production function; Rules of partial differentiation and interpretation of partial derivatives; Problems of maxima and minima in single and multivariable functions; Unconstrained and constrained optimization in economic problems; Problems in market equilibrium.

Unit II: Integral calculus and Applications

Concept of integration; Simple rules of integration; Application to consumer's surplus and producer's surplus; Growth rates and simple properties of time path of continuous variables.

Unit III: Matrix Algebra & Determinants

Determinants and their basic properties; Solution of simultaneous equations through Cramer's rule; Concept of matrix – their types, simple operations on matrices, matrix inversion and rank of a matrix; Concept of vector – its properties; Matrices and vectors; Concept of quadratic forms – Eigen roots and Eigen vectors; Introduction to input-output analysis.

Unit IV: Differential Equation and Applications

Difference equations – Solution of first order and second order difference equations; Applications in trade cycle models; Growth models and lagged market equilibrium models.

Unit IV: Linear Programming and Game Theory

Linear programming – Basic concept, formulation of a linear programming problem. Its structure and variables; Nature of feasible, basic and optimal solution; Solution of linear programming through graphical and simplex method; Statement of basic theorems of linear programming; 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 a game; Strategies – simple and mixed; Value of a game; Saddle point solution; Applications.

Reading List

1. Chiang, A.C. and K. Wainwright (2005), *Fundamental Methods of Mathematical Economics*, McGraw-Hill Higher Education.
2. Dadkhan, K.M. (2011), *Foundation of Mathematical and Computational Economics*, South western
3. Dowling, E. T. (2011), *Introduction to Mathematical Economics*, McGraw Hill Ltd.
4. Hoy, M., J. Livernois, C. McKenna, R. Rees and T. Stengos (2011), *Mathematics for Economics*, MIT Press.
5. Yamane, Taro (1975), *Mathematics for Economists*, PHI, New Delhi.
6. Allen, R.G.D.(1974), *Mathematical Analysis for Economists*, Macmillan Press, New Delhi.

7. Handry, A.T.(1999), Operations Research, PHI, New Delhi.
8. Beavis & Dobbs (1990), Optimization and Stability Theory for Economic Analysis, CUP
9. Chiang and Wainwright (2005), Fundamental Methods of Mathematical Economics, McGraw-Hill.
- 10.Dixit, A.K (1990), Optimization in Economic Theory, OUP.
- 11.Gravelle, H and R Rees (1992), Microeconomics, Pearson Education
- 12.Hoy, et al. (2001), Mathematics for Economics, Prentice-Hall.
- 13.Intrilligator (1971), Mathematical Optimization and Economic Theory, Prentice Hall
- 14.Mas-Colell, A., M. Whinston and J. Green (1995), Micro-economic Theory–Mathematical Appendices, OUP
- 15.Silberberg, E. and W. Suen (2000), The Structure of Economics: A Mathematical Analysis, McGraw-Hill.
- 16.Simon, C.P. and L. Blume (1994), Mathematics for Economists, Norton
- 17.Sundaram, R.K. (1996), A First Course in Optimization Theory, CUP
- 18.Varian, H. R (1992), Micro-economic Analysis, W.W. Norton & Co. NY
- 19.Henderson, J. M., and R. E Quant: Microeconomic Theory; A Mathematical Approach, 3rd edition, McGraw Hill, New York, 1980
- 20.Bradley, Teresa. And Patton Paul: Essential Mathematics for Economics and Business, 2nd edition, Wiley India
- 21.Dowling, E.T: Introduction to Mathematical Economics, 2nd edition, Schaum's Outline Series, McGraw Hill, New York, 1992

Course Code: CC-4

Public Economics

Objectives: *Public finance touches our everyday life - not just the taxes, but the social welfare expenditure schemes, the growth and economic development. Every year, when government presents its annual accounts we witness a lot of excitement, media coverage, discussions and debates. But public finance is much more than glancing at the annual budgets and reacting to that.*

Unit I: Rationale for Public Policy

Allocation of resources – Provision of public goods; Voluntary exchange models; Impossibility of decentralized provision of public goods (contributions of Samuelson and Musgrave); Demand revealing schemes for public goods – Tiebout model, theory of club goods; Stabilization Policy – Keynesian case of stabilization policy; Uncertainty and expectations; Failure of inter temporal markets; Liquidity preference; Social goals; Poverty alleviation; Provision of infrastructural facilities, removing distributional inequalities and regional imbalances.

Unit II: Public Expenditure

Wagner's law of increasing state activities; Wiseman-Peacock hypothesis; Pure theory of public expenditure; 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; Programme budgeting and Zero base budgeting.

Unit III: Taxation

Theory of incidence; Alternative concepts of incidence – Allocative and equity aspects of individual taxes; Benefit and ability to pay approaches; Theory of optimal taxation; Excess burden of taxes; Trade-off between equity and efficiency; Theory of measurement of dead weight losses; The problem of double taxation; VAT and GST– principles and issues

Unit IV: Public Debt

Classical view of public debt; Compensatory aspect of debt policy; Burden of public debt; Sources of public debt; Debt through created money; Public borrowings and price level; Crowding out of private investment and activity; Principles of debt management and repayment.

Unit V: Fiscal Policy

Objectives of fiscal policy – full employment, anti-inflation, economic growth, redistribution of income and wealth; Interdependence of fiscal and monetary policies; Budgetary deficit and its implications; Fiscal policy for stabilization – Automatic vs discretionary stabilization; Alternative measures of resource mobilization and their impact on growth, distribution and prices; Balanced budget multiplier.

Unit VI: Fiscal Federalism

Principles of multi-unit finance; Fiscal federalism in India; Vertical and horizontal imbalances; Assignment of function and sources of revenue; Constitutional provisions; Finance Commission; Devolution of resources and grants; Theory of grants; Resource transfer from Union to States – Criteria for transfer of resources; Centre-State financial relations in India; Problems of states' resources and indebtedness; Transfer of resources from Union and States to local bodies.

Reading list

1. Atkinson, A. B., & Stiglitz, J. E. (1980). Lectures in Public Economics. McGraw-Hill, Economics Handbook Series.
2. Auerback, A. J., & Feldstein, M. J. (1985). Hand Book of Public Economics (Vol. 1 & 2). New York/ Amsterdam: North-Holland.
3. Backhaus, J. G. (2002). Old or New Public Finance? A Plea for the Tried. Public Finance Review, 30, 612-30.
4. Buchanan, J. M. (2003). Public choice: Origins and development of a research program. Fairfax, Virginia: Centre for Study of Public Choice, George Mason University.
5. Myles, G. (2006). Intermediate Public Economics. MIT Press.
6. Vithal, B. P., & Sarma, J. V. (2002, August 24). Twelfth Finance Commission: Framing its Terms of Reference. Economic and Political Weekly.
7. Goode, R.(1986), Government Finance in Developing Countries, TMH, New Delhi.
8. Jha. R.(1998), Modern Public Economics, Routledge, London.
9. Musgrave, R.A. and P.B.Musgrave (1976), Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo.
10. Atkinson, A.B. and J.E. Sgilitz (1980), Lectures on Public Economics, TMH, New York.
11. Herber, B.P. (1967), Modern Public Finance, Richard D.Irwin, Homewood

Semester –II

Course Code: CC-5

Economic Growth and Development

Objectives: *Development Economics as a discipline encompasses different approaches to the problems of unemployment, poverty, income generation, industrialization from different perspectives. The present course enables the student with different tools of analysis while simultaneously equips the student to appreciate alternative perspectives in development theory and policy.*

Unit I: Approaches to Economic Growth and Development

Economic growth and development – Factors affecting economic growth: capital, labour and technology; Growth models – Harrod and Domar, instability of equilibrium; Neo-classical growth models – Solow and Meade, Mrs. Joan Robinson's growth model; Cambridge criticism of Neo-classical analysis of growth; The capital controversy.

Unit II : Technological Progress and Economic Growth

Technological progress- embodied and disembodied technical progress; Hicks, Harrod, learning by doing, production function approach to the economic growth; Total factor productivity and growth accounting; Growth models of Kaldor and Pasinetti, optimal savings and Ramsay's rule, golden rule of accumulation, two-sector model of Ujawa, stability of equilibrium; Money in economic growth, Tobin, Levhari, Patinkin and Johnson; Endogenous growth; Intellectual capital; Role of learning, education and research; AK model – Explanations of cross-country differentials in economic growth.

Unit III : Social and Institutional aspects of Development

Development and underdevelopment – Perpetuation of underdevelopment; Poverty – absolute and relative; Measuring development and development gap – Per capita income, inequality of income, Human development index and other indices of development and quality of life – Food security, education, health and nutrition; Human resource development; Population problem and growth pattern of population – theory of demographic transition; Population as limits to growth and as ultimate source – population, poverty and environment; Economic development and institutions – markets and market failure, state and state failure, issues of good governance; Sustainable Development.

Unit IV: Schools of Development

Classical theory of development – contributions of Adam Smith, Ricardo, Malthus and James Mill; Karl Marx and development of capitalistic economy – theory of social change, surplus value and profit; Immutable laws of capitalist development; crisis in capitalism – Schumpeter and capitalistic development; Innovation – role of credit, profit and degeneration capitalism; structural analysis of development; Imperfect market paradigm.

Unit V : Theories of Growth and Development

Approaches to development - Partial theories of growth and development – vicious circle of poverty, circular causation, unlimited supply of labour, big push, balanced growth, unbalanced growth, critical minimum effort thesis, low income equilibrium trap; Dualism – technical, behavioural and social; Ranis and Fie model; Dixit and Marglin model, Kelly et. al. Model; Dependency theory of development; Structural view of development.

Reading List

1. David Harvey (2007), *A Brief History of Neoliberalism* Publisher: OUP, Oxford
2. Keshab Das (2004), *Uneven Development and Regionalism: A Critique of Received Theories* Published in *Economic and Political Weekly* Vol XXXIX No. 45, November 06, 2004
3. *Walter Eltis* (2000): *Classical Theories of Economic Growth* Publisher: Palgrave Macmillan
4. A K Sen (1970): *Growth Economics*: Publisher Penguin 1977
5. Halin Mathews : *Theories of Economic Growth*. (Surveys in Economic Theory, Vol. 2, AEA
6. *Todara and Smith(2011)*: *Economic Development* (11th Edition or latest) Publisher: Prentice Hall; 11 edition (March 26, 2011)
7. Todara (1977) : *Economic Development in the Third World* Publisher: Longman, 1977
8. I. Adelman (1961), *Theories of Economic Growth and Development*, Stanford University Press, Stanford.
9. B. Higgins (1959), *Economic Development*, W.W. Norton, New Delhi.
10. Michael P. Todaro (1996), *Economic Development*, Longman, London.
11. A.P. Thirlwal (1999), *Growth and Development*, MacMillan, London.

Course Code: CC-6
Statistical Methods for Economics

Objectives: *This course tends to equip the students with the fundamental concepts of statistical tools and techniques. Further the course will be taught in exercise based manner. Therefore, it will enable the students to analyze quantitative and qualitative data.*

Unit I: Time Series and ANOVA

Components of a time series, Analysis of time series- Mathematical methods for time series, Graphic or free hand curve fitting method, measurement of seasonal variation, forecasting, numerical problems.
Analysis of Variance- One way and two way classifications, Mathematical model, Statistical analysis of model, Hypothesis testing for more than two means, statistical applications.

Unit II: Review of Basic Statistical Tools

Review of descriptive statistics, Fundamentals of Probability: Random variables and their probability distributions (Binomial, Poission, Normal) Mathematical Expectation and its Properties, Joint distributions, conditional distributions and independence, Probability Density Function, Central Limit Theorem

Unit III: Sampling Theory

Distributions of sample mean and sample variance. Estimation: parameter and statistic, estimates and estimators, point estimators and its properties (small sample and asymptotic properties), confidence intervals for population parameters

Unit IV: Hypothesis Testing

Defining statistical hypotheses; null v/s alternative hypotheses, Type I and Type II errors; power of a test; the concept of degrees of freedom; Test of statistical hypotheses: Z, t, and F-tests, Chi-square test, Hypothesis testing for more than two means, statistical applications, Non-parametric test.

Reading List

1. Gupta, S. C., (2012), Fundamentals of Statistics, Himalaya Publishing House.
2. Black, Ken (2012), Business Statistics for Contemporary Decision Making, Willy India
3. John E. Freund's Mathematical Statistics with Applications (7th Edition), Irwin
4. Miller (Author), Marylees Miller (Author), Prentice Hall (2003)
5. Kenny and Keeping : Mathematical Statistics, Part 1 &Part II
6. R.G.Hogg and A.T.Craig : Introduction to Mathematical Statistics, Pearson Education (Indian Edition)
7. V. K. Rohatgi and A. K. M. E. Saleh, An Introduction to Probability and Statistics, 2nd Edition, Wiley (2000).
8. Speigal. M.R.(1992), Theory and Problems of Statistics, McGraw Hill, London. 2.
9. Monga,G.S.(1972), Mathematics and Statistics for Economists,Vikas Publications, New Delhi

Course Code: CC-7

Econometrics

Objectives: To endowing students with the theoretical knowledge of basic econometrics tools which they can use for formulating and developing econometric model for applications on real economic situations.

Unit-I: Classical Linear Regression Model

Collection of Data: Primary Data, Secondary Data, Various Methods of Collection of Primary Data, Census and Sample of Data, Various Sampling Techniques, t Distribution, Chi Square and F Distribution, What is a Regression Model, Regression versus Correlation, Simple Regression, The Assumption underlying the Classical Linear Regression Model, Properties of OLS estimator, introduction to Statistical inference.

Unit-II: Further Development and Analysis of the Classical Linear Regression Model

Generalising the Simple model to Multiple Linear Regression Model, The Constant term, how are the Parameters calculated in the generalized case? Testing multiple hypothesis: the F-test, Goodness of fit statistics

Unit-III: Autocorrelation

Nature and Scope of Autocorrelation, Sources of Autocorrelation- Omitted Explanatory variables, Interpolation in the statistical observations, Testing for Autocorrelation, Solutions for Autocorrelation, Methods of estimating ρ - Estimated from the Residuals, D-W Statistics, Theil and Nagar Method.

Unit-IV: Multicollinearity

Consequences of Multicollinearity, Direction of Multicollinearity, Auxiliary Regressions, Variance inflation factor, Relationship between R^2 and VIF, Solution to the problem of Multicollinearity.

Unit-V: Heteroscedasticity

Consequences of Heteroscedasticity, Testing of Heteroscedasticity with error term, Causes of Heteroscedasticity, Test for Heteroscedasticity- Spearman's rank correlation test, Park test, Glejser test, Goldfeld- Quandt test, Breusch-Pagan Test, Remedies for Heteroscedasticity.

Unit-VI: Identification and Simultaneous Equation Methods

Endogenous and exogenous variables, structural and reduced form equations, structural and reduced- form equations, Identification problems in economics, Order and rank for identifiability, Simultaneous versus recursive equation system, 2SLS- exactly and over identified, Recursive methods and OLS; Indirect least squares (ILS); 2SLS, 3SLS and ML methods – applications.

Reading List

1. Greene, W.H., Econometric Analysis, 4th edition, Prantice Hall, 2000.
2. Gujarati, D., D. Porter and S. Gunasekar (2011), Basic Econometrics, McGraw Hill Education (India) Private Limited
3. Gujarati, D.N. (1995), Basic Econometrics (2nd Edition), Mcgraw Hill, New Delhi.

4. Hair, Black, Babin, Anderson and Tatham, *Multivariate Data Analysis*, Pearson Education
5. Johnston & Dinardo (2006), *Econometric Methods*, McGraw Hill International Edition
6. Johnston, J. and J. DiNardo, *Econometric Methods*, Fourth Edition, McGraw-Hill, latest edition.
7. Johnston, J. and J. Dinardo: *Econometric Methods*, McGraw Hill.
8. Johnstone, J., *Econometrics Methods*, 3rd Edition, McGraw Hill, New York, 1994.
9. Kementa J., *Elements of Econometrics*, Macmillan Publishers Limited, 1986
10. Koutsoyiannis, A. *The Theory of Econometrics*, 2nd Edition, ESLB.
11. Maddala, G.S. (2002), *Introduction to Econometrics* (3rd Edition), John Wiley & Sons Ltd.
12. Maddala, G.S. and K. Lahiri (2009), *Introduction to Econometrics*, John Wiley & Sons.
13. Maddala, G.S: (Ed.) (1993), *Econometric Methods and Application* (2 Volumes)
14. Mukherjee, Chandan, Howard white and Marcwuyts (1998) *Econometrics and Data Analysis for Developing Countries*, Rutledge New York.
15. Ramanathan, Ramu, *Introductory Econometrics with Applications*, Harcourt Academic Press, 2002 (IGM Library Call No. 330.0182 R14I).
16. Richard A.J. and D.W. Wichern, *Applied Multivariate Statistical Analysis*, Pearson Education.
17. Stewart, J. and L. Gill, *Econometrics*, Second Edition, Prentice Hall, 1998
18. Wooldridge, J. M.: *Econometrics*, CENGAGE Learning.
19. Wooldridge, J.M. (2008), *Introductory Econometrics-A Modern Approach*.3rd Edition, India Edition.

Course Code: CC-8
Part-I

Overview of Marketing Research

Objectives: *The main objective of this course is to equip students with the key concepts and methods of marketing research, and allow student to understand how to apply those tools to solve real-life business problems. This course focuses equally on (i) technical competence and (ii) application to real-life problems. We cover the technical aspects of marketing research (both qualitative and quantitative research methods) through the lectures and seven (short) individual homework assignments. We also discuss real life application using various mini-cases..*

Unit-I: Marketing Research Dynamics

Introduction, Meaning of Research, Research Characteristics, Various Types of Research , Marketing Research and its Management, Nature and Scope of Marketing Research , Marketing Research in the 21st Century (Indian Scenario), Marketing Research: Value and Cost of Information, Meaning of Research Design, Types of Research Design, Descriptive Research, Causal Research Design, Research Design and Marketing Decision Process, Choosing a Good Research Design

Unit-II: Measurement and Scaling Techniques

Introduction, Importance of Measurement and Scaling in Marketing Research, Scales of Measurement: Fundamental Properties, Primary Scales of Measurement, Attitude Measurement Scales, Types of Comparative Scales, Non – Comparative scale, Selecting an Appropriate Scale, Scale Evaluation, Meaning and Nature of Secondary Data, Advantages of Secondary Data, Drawbacks of Secondary Data, Types of Secondary Data Sources, Primary Data and its Types

Unit-III: Data Interpretation and Report Writing

Introduction, Data Interpretation, Research Report, Modus Operandi of Writing a Market Research Report, Structure of the Report, Components of a Report, Style and Layout of a Report, Revising and Finalizing the Research Report, Quality Research Report, Responsibilities of a Market Research Report Writer, Presenting the Report.

Unit-IV: Recent Trends in Marketing Research

Introduction, Marketing Information System and Research, Online Marketing Research, Recent Trends in Marketing Research, Research in Lifestyle Retail, Marketing Research and Social Marketing, Rural Marketing Research, Trends in Services Marketing Research, Brand Equity Research, International Marketing and Branding Research

Reading List

1. Zikmund, Babin & Carr: Business Research Methods, South-Western.
2. Cooper & Schindler: Business Research Methods McGraw-Hill Education,
3. Churchill: Marketing Research: Methodological Foundations, Cengage Learning.
4. Aaker, Kumar, Day - Marketing Research. Wiley.
5. Naresh Malhotra – Marketing Research, Pearson.

Part-II

Market/ Industry Survey and G.D ***(Internal Examination)***

Objectives

The aim of the course is to provide the students with the theoretical tools and practical experience necessary for the appraisal of field study. This course places particular emphasis on understanding the concepts and the advantages and drawbacks of each of the main approaches used. The course will also familiarize the students with case studies which demonstrate the use of these techniques in practice.

This course is a field based market/ small scale industry survey to be done by the students under the overall guidance of the faculty members of the department. Each student will prepare and submit a survey report (35 marks) and group discussion (20 marks) and attendance (05 marks) before the board of examiners comprising all the faculty members of the department.

The field survey is initiated with well-defined procedure. It is performed in the following functionally interrelated stages:

- I. Defining the Problem
- II. Literature Review
- III. Objectives
- IV. Scope
- V. Tools and Techniques
- VI. Compilation and Computation
- VII. Presentations
- VIII. Bibliography

Semester –III

Course Code: DCE-I ***Agricultural Economics – I***

Objectives: *The objective is to impart a breadth of knowledge and analytical skills to the students in the field of agricultural economics. The subject will enhance their understanding on policy matters that are relevant to Indian agricultural economy, and enable them to comprehend contemporary issues like food security and sustainable agriculture practices in a complex and changing scenario.*

Unit I: Introduction to the Economics of Agriculture

Conceptual framework: Resources and their carrying capacity; population pressure and agricultural responses; Ecological system and agricultural development; Concepts of Sustainability and optimality; Sustainability Indicators in agriculture; Development and poverty linkages with natural resources degradation in agriculture.

Unit II: Role of Agriculture in Economic Development and Agriculture in the Models of Economic Growth

Problems in agricultural policies, protection from wages, planning in agriculture, international trade in agricultural commodities, role of agriculture in economic development, agriculture in the models of economic growth.

Unit III: Determination and Behaviour of Agricultural Prices

Behaviour of agricultural prices, demand and supply of agricultural produce, Cobweb cycle, price and income stability, marketed and marketable surplus, role of public price and support price, supply – price relationship.

Unit IV: Role of Capital and Agricultural Credit – Organized and Unorganized Capital Market

Role of capital, sources of capital, allocation of capital, characteristics of agricultural credit, classification of agricultural credit, essentials of agricultural credit, sources of agricultural credit, estimate of credit requirements, theories of agricultural finance, different kinds of loan arrangement.

Unit V: Interlinking Land and Water Conservation and Development

Approaches and policy, Legislation, Land and water conservation measures- Command Area Development and Watershed programmes.

Unit VI: Risk and Uncertainty in Farming with Crop Insurance

Introduction of risk and uncertainty, significance of incidence of risk, decision taking methods involving risk and uncertainty, account of risk taking, Todaro model, types of uncertainty, steps against risk and uncertainty, policies to promote market efficiency, policies to assist farmers in cropping with risk.

Reading List

1. Bhalla, G. S. (1994), Economic Liberalization and Indian Agriculture, Institute for Studies in Industrial Development, New Delhi. •
2. Bhaduri, A.: The Economic Structure of Backward Agriculture • Gulati, A. and T. Kelly: Trade Liberalisation and Indian Agriculture.

3. Lewis, W.A.: Economic Development with unlimited Supplies of Labour.
4. Mellor, J.W.: The Economics of Agricultural Development.
5. Rudra, A.: Indian Agricultural Economics: Myths and Reality.
6. Sadhu, A.N. and J. Singh: Agricultural Problems in India
7. Saini, G.R.: Farm Size, Resource Use Efficiency and Income Distribution.
8. Schultz, T.W.: Transforming Traditional Agriculture.
9. Soni, R.N.: Leading Issues in Agricultural Economics
10. Deshpande, R.S.(2008): *Price Policy and Minimum Support Prices in a Changing Rural Economy* in S.K. Bhaumick (ed.) *Reforming Indian agriculture*, Sage.
11. Ellis, F.: *Peasant Economics—Farm Households and Agrarian Development*
12. Mohan, R.(2006): *Agricultural Credit in India: Status, Issues and Future Agenda* in EPW, march 18.
13. R.L. Soni: *Leading Issues in Agriculture Development*, Kalyani Publication, Ludhiana.
14. Shetty, S.L.(2009): *Agricultural Credit and indebtedness: Ground Realities and Policy Perspectives* in D.N Reddy and S. Mishra (ed.) *Agrarian Crisis in India*, OUP.
15. Yang: *Techniques of Farm Management Analysis*

Course Code: DCE-2

International Trade and Finance – I

Objectives: To familiarize students with the theoretical and fundamental aspects of international trade and finance.

Unit I: Traditional and New Theories of Trade

Absolute advantage and comparative advantage approaches to international trade; The specific factors model; Heckscher-Ohlin model and empirical testing; Factor price equalization theorem ; Rybczynski theorem; Leontief Paradox, Haberler's opportunity cost theory; Constant, Increasing and Decreasing opportunity cost and international trade.

Unit II: Complementary Trade Theories

Specific factor model- (a) Single Specific factor case; changes in factor endowments; effects of price changes; (b) Two specific factor case; Technological gap and Product cycle models and trade-Technological gap or Imitation gap model, Product cycle model; Linder's theory of demand and trade pattern; the Karvins theory of trade; Keessing theory of Trade.

Unit III: Intra-Industry Trade

Emergence of Intra industry trade: Grubel-Lloyd Index; Neo-Heckscher-Ohlin model; Neo-Chamberlinian model, neo-Hotelling models; Brander-Krugman model; Reciprocal dumping model; Krugman's Model; Empirical work on IIT.

Unit IV: International Trade Policies

Trade policies: concept and types; Tariff and non-tariff barriers (quota, VERs; Government procurement, safety, health, environmental and technical barriers), export subsidies; Theory of tariffs: types, welfare effects, effective protection; Theory of import quotas: welfare effects; Arguments for free trade and protection, General equilibrium analysis of Tariff in small and large countries, Stolper-Samuelson theorem-tariff and income distribution ; optimum tariff; Non –tariff barriers: Quotas, Voluntary export restraints, international cartels, dumping, export subsidies.

Unit V: International Trade and Economic Development

The role of trade in economic development- Classical and Neo-Classical View; Modern views on trade and development; Export pessimism; Prebisch-Singer Hypothesis, Reasons for deterioration in the commodity terms of trade; import substitution and economic development; openness, trade and growth: Some empirical evidence, Dynamic effects of Custom Union; European Economic Community (EEC); Integration among the less developed countries ASEAN- SAARC, SAPTA, SAFTA, Eurozone Debt Crisis.

Reading List

1. Bhagwati, J. (Ed.) (1981), International Trade, Selected Readings, Cambridge, University Press Massachusetts
2. Carbaugh, R.J. (1999), International Economics, International Thompson Publishing, New York
3. Chacholiades, M (1990), The Pure Theory of International Trade, McGraw Hill.

4. Cherunilam F, International Economics, Fifth Edition, the Tata McGraw-Hill Companies, 2011
5. Dunn, R.M. and Mutti, J.H (2000), International Economics, Routledge Publishers, London
6. Kindleberger, C.P. (1973), International Economics, R.D. Irwin, Homewood.
7. King, P.G. (1995), International Economics and International Economic Policy : A Reader, McGraw Hill International, Singapore.
8. Paul, R. K & Obstfeld, M (1999), International Economics: Theory and Policy, Addison-Wesley
9. Salvatore D (1998), International Economics, Prentice Hall.
10. Sodersten, Bo (1991). International Economics, The Macmillan Press.
11. Batra, Raveendra N. (1975). The Pure Theory of International Trade under Uncertainty, The Macmillan Press Ltd., London.
12. Carboigh, R.J. (1999). International Economics, International Thompson Publishing, New York. 3. Cherunilam, Francis (1988). International Economics, Tata McGraw-Hill Publishing Co. Ltd., New Delhi.
13. Dana, M.S. (2000). International Economics: Study, Guide and Work Book, Routledge Publishers, London.
14. Dunn, R.M. and J.H.Mutti (2000). International Economics, Routledge Publishers, London. 6. Ellsworth, P.T. and J.C.Leith (1975). The International Economy, The Macmillan Company, New York.
15. Haberler, G. (1937). The Theory of International Trade, Macmillan & Co. Ltd., London. 8. Heller, H. Robert (1968). International Monetary Economics, Prentice-Hall of India Pvt. Ltd., New Delhi.
16. Johnson, H.G. (1967). International Trade and Economic Growth, Harvard University Press, Cambridge.
17. Kemp, K.C. (1964). The Pure Theory of International Trade, Prentice Hall, New Jersey. 11. Neihans, J. (1984). International Monetary Economics, John Hopkins University Press, Baltimore.
12. Salvatore, D. (1997). International Economics, Prentice Hall, New York.

Course Code: DCE-3

Regional Economics

Objectives: *Regional Economics as a discipline encompasses different approaches. Concern, controversy, and experience have brought into focus some basic issues of regional development objectives and policy, to which we now turn. The ultimate objectives of regional economic policy run in terms of promotion of individual welfare, opportunity, equity, and social harmony.*

Unit I: Conceptual Basis of Regional Planning

Nature, Scope, rationale and objectives of Regional Economics, Interaction between national and regional economic development. National goals for regional policy. Consistency between national and regional objectives. Need for regional planning.

Unit II: Regional Economic Problems

Objectives and scope of regional economic analysis; Inter-disciplinary aspects of regional economics; Concept of a region, its definition, types and description; economic behaviour related to space; Composition and structure of regional activities; The regional economic problems – Causes.

Unit III: Theories of Regional Economic Development

Theories of regional economic development: Cumulative causation (Perroux, Myrdal, Hirschman) – Export base theory - Central place theory (Christaller), Sector theory (Colin- Kuznets) - Stage theory (Rostow).

Unit IV: Theory of Location and Regional Disparities

Theory of location – Weber's theory of location – Spatial dispersion of progress – Dispersion of innovation and technical progress – Sectoral growth centres – Area – Urban bias Regional disparities – Trends in regional income disparities – Inter-state variations of poverty and unemployment – Comparative analysis of industrial development in different states – Agricultural development in different stages.

Unit V: Problems and Prospects of Tea, Tobacco and Tourism industries in North Bengal

Tea Production & Labour: Process of tea production, process of recruitment of labour, their transportation & settlement, conditions of plantation labourers, Problems and future prospects

Tourism: Definition & Meaning of Tourism, Origin & history of Tourism, Scope of tourism, Types & forms of tourism, Classification of Tourism, Problems and future prospects

Tobacco: Origin & history of Tobacco, Scope of Tobacco production, Types & forms of Tobacco, Problems and future prospects.

Reading List

1. Beckman, M.J (1968), Location theory, Randem House, New York.
2. Brahmananda, P.R. and Panchmukhi, (2001), Development Experience in the Indian Economy, Bookwell, New Delhi.
3. Dean, R.D et. al. (eds.) (1970), Special Economic Theory, Free Press, New York.
4. Losch (1970), The Economics of Location, Yale University Press, New Haven
5. Misra, R.P (1974), Regional Development Planning in India, Vikas, New Delhi

6. Myrdal, G (1968), Economic theory and Underdeveloped Regions, Vora, New Delhi
7. Richardson (1960), Elements of Regional Economics, Penguin Books, London.
8. Shrivastave, Q.S (1992), Regional Economics, Anmol Publications, New Delhi.
9. Tinbergen, J. (1969). The Elements of Space in Development Planning, North Holland , Amsterdam
10. Walter, I (1968), Methods of Regional Analysis, MIT Press, Cambridge
11. Sebastian Karoemprel, B. Dutta Roy (ed.), Tea Garden Labourers of North East India: A Multidimensional Study on the Adivasis of the Tea Gardens of North East India; Vendrome Institute, Shillong.
12. P.C. Sinha, Tourism Evolution Scope Nature & Organization. Anmol Publication.
13. Chaudhary Manjula, 2010, Oxford University Press, New Delhi, Tourism Marketing
14. Dash M.C. (1993) fundamentals of Ecology (New Delhi), Tata McGraw Hill Co.Ltd.Publishing Co. Ltd.)

Course Code: GE-I

Foundation Course in Research Methods & Data Analysis

Objectives: a) To familiarize participants with basic of research and the research process. b) To enable the participants in conducting research work and formulating research synopsis and report. c) To familiarize participants with Statistical packages such as SPSS/EXCEL. d) To impart knowledge for enabling students to develop data analytics skills and meaningful interpretation to the data sets.

Unit I: Introduction to Research Process

What is Research? - Meaning and Characteristics - Types of Research - Methods - Planning a Research - Identification of Research Problem - Defining the Research Problem - Theoretical Foundation - Review of Literature - Objectives - Hypotheses - Difference between a Proposition, a Hypothesis and a Theory - Data Source - Sampling - Scope - Methodology - Research Design - Classification of Research: Pure and Applied Research - Qualitative, Quantitative and Mixed - Exploratory, Descriptive, Diagnostic, Evaluation, Action and Experimental Research - Historical Research - Surveys - Case Study - Field Study - Steps in Research.

Unit II: Sampling Considerations and Data Processing

Sampling Considerations: Concepts - Sample v/s Census - Principles of Sampling Design & Process - Types of Sample Design: Probability Sampling Techniques: Simple Random, Stratified Random, Cluster and Multi-Stage and other Methods of Sampling. Non-Probability Sampling Techniques: Quota Sampling, Convenient Sampling, Purposive Sampling, Judgment Sampling and other Methods - Determination of Sample Size - Advantages and Disadvantages - Errors in Sampling. Data Processing: Processing and Distribution - Field Work Validation - Tabulation - Editing - Coding - Classification and Tabulation of Data - Presentation - Graphical Representation.

Unit III: Data Sources and Methods of Data Collection

Sources of Data: Primary and Secondary Sources of Data - Quantitative Data: Availability of Sources - Time Series Data - Cross Section Data and Pooled Data - Census, Reports and Documents, other Published and Unpublished Sources. Qualitative Methods of Data Collection: Direct Observation - Indirect Observation: Interview Method, Schedules and Questionnaires - Questionnaire Designing Procedure - Case Study, Projective Methods - Simulation - Merits & Demerits

Unit IV: Data Analysis and Interpretation

Univariate and Multivariate Data Analysis - Descriptive vs Inferential Analysis - Descriptive Analysis of Univariate Data and Bivariate Data - Testing of Hypotheses: Concepts, Steps in Testing of Hypothesis. Estimation of Mean: Test of Single Sample Mean - Two Independent Means Tests - Testing for Means of Paired Data - Testing for the Equality of 'K' Population Means - Different Tests.

Unit V: Report Writing and Presentation of Results

Importance of Report Writing - Types of Reports: Brief Reports, Detailed Reports, Limitations of the Study, and End Notes - Report Writing: Report Formulation - Effective Documentation: Need and Guidelines: Presenting Tabular Data, Visual Representations: Tables, Graphs, Charts - Presenting Footnotes and Bibliography - Oral Presentation of Research.

Reading List

1. Bryman Alan, *Social Research Methods*, Oxford University Press, Oxford.
2. Kothari C.R., *Research Methodology*, New Age International Publication, New Delhi.
3. Krishnawamy O.R. and Ranghanathan, M., *Methodology of Research in Social Sciences*, Himalaya Publishing House, Bangalore.
4. Kurian C.T. *Research Methodology in Economics*, Institute of Development Studies, Madras.
5. Majumdar P.K., *Research Methods in Social Science*, Viva Books Private Limited, New Delhi.
6. Robert, A. Day, *How to Write and Publish a Scientific Paper*, Cambridge University Press, Great Britain.
7. W. G. Cochran (1977)- *Sampling Technique*, John wiley, New York.
8. W.J. Goode and P.K. Hatt (1952) - *Methods in Social Research*, McGraw Hill, New York.
9. T.S. Wilkinson and P.L. Bhandarkar (1994) *Methodology and Techniques of social Research*, Himalaya Publishing

Semester –IV

Course Code: DCE-4 ***Agricultural Economics – II***

Objectives: The objective is to impart a breadth of knowledge and analytical skills to the students in the field of agricultural economics. The subject will enhance their understanding on policy matters that are relevant to Indian agricultural economy, and enable them to comprehend contemporary issues like food security and sustainable agriculture practices in a complex and changing scenario.

Unit-I: Economics of Farm Management

Concept of farm management, limitations of the conventional farm management analysis, farm budgeting, types of budget, stages involved in budget, system index, measurement of farm income, measurement of farm costs, composition and classification of production cost, cost concepts used in farm management studies in India.

Unit II: Agricultural Production Functions

Power function, Spillman production function, Cobb-Douglas production function, quadratic function

Unit-III: Contribution of Agriculture through Labour in Economic Development

Changes in the labour force in course of the transformation of the economy, Folk-Dowling cultivation, surplus labour in agriculture- Nurkse viewpoint.

Unit-IV: Farm Size and Productivity of Land Controversy

Introduction of the controversy, Studies of A.P. Rao, A. Rudra, G.R Saini, Usha Rani and M. Ghosh

Unit-V: Share Cropping as a Contractual form in Agriculture

Concept of share cropping in Indian agriculture, studies of Gale Jenhnson, S.N.S Cheung, P.K Bardhan and T.N Srinivasan .

Unit-VI: Forced Commerce in the Market for Agricultural Produce

Concept of forced commerce, concept of distress sale and buying, temporal inaccessibility to the market of the small peasants, example of forced commerce assuming an invariant production cycle of paddy and rice.

Reading List

1. Bhalla, G. S. (1994), Economic Liberalization and Indian Agriculture, Institute for Studies in Industrial Development, New Delhi.
2. Bhaduri, A.: The Economic Structure of Backward Agriculture

3. Gulati, A. and T. Kelly: Trade Liberalisation and Indian Agriculture.
4. Lewis, W.A.: Economic Development with unlimited Supplies of Labour.
5. Mellor, J.W.: The Economics of Agricultural Development.
6. Rudra, A.: Indian Agricultural Economics: Myths and Reality.
7. Colman, David & Trevor Young (1989): Principles of Agricultural Economics-Markets and Prices in Less Developed Countries, Cambridge University Press.
8. Desai, Pranav K. (2010): Agricultural Economics, Biotech Books, Delhi.
9. Ellis, Frank (1988): *Peasant Economics - Farm Households and Agrarian Development*, Cambridge University Press.
10. Evenson, Robert E. & Prabhu Pingali (2010): Hand Book of Agricultural Economics, North-Holland.
11. Ghatak, Subrata and Ken Ingersent 1984): *Agriculture and Economic Development*, Select Book Service Syndicate, New Delhi by arrangement with Harvester Press Ltd., London.
12. Martin, Lee R. (ed.) (1992): *A Survey of Agricultural Economics Literature*, Vol.4 (Agriculture in Economic Development), University of Minnesota Press.
13. Norton, George W. and Jeffrey Alwang (2010, 2/e): *Introduction to Economics of Agricultural Development*, McGraw-Hill, Inc.
14. Prasad, Chandra Shekhar (2009): Agriculture and Rural Development in India, New Century Publications, New Delhi.
15. Soni, R. N. (3/e) (1998): Leading Issues in Agricultural Economics, Shoban Lal Nagin Chand & Co., Jalandhar.
16. Sadhu, A.N. and J. Singh: Agricultural Problems in India
17. Saini, G.R.: Farm Size, Resource Use Efficiency and Income Distribution.
18. Schultz, T.W.: Transforming Traditional Agriculture.
19. Soni, R.N.: Leading Issues in Agricultural Economics

Course Code: DCE-5

International Trade and Finance – II

Objectives: To familiarize students with the theoretical and fundamental aspects of international trade and finance.

Unit I: Balance of Payments-Adjustment Mechanisms

Balance of payments adjustment variation in exchange rates, Devaluation and balance of Payment Adjustment; Elasticity approach, Marshall-Lerner conditions; J-curve effect, BoP adjustment- Capital movement & expenditure policies- expenditure reduction policies, expenditure switching policies, Monetary approach to BoP.

Unit II: Foreign Exchange Rate Policy

Foreign exchange market, Determination of equilibrium exchange rates; spot and forward rates of exchange; Portfolio balance approach; Fixed or pegged Exchange Rate System; Flexible or Fluctuating rate system; Policies of Managed Flexibility system, Multiple Exchange rates, Exchange controls- meaning and objectives; Methods of Exchange controls.

Unit III: International Financial Institutions

International Monetary Fund; IBRD; IDA, IFC, ADB- objectives, functions, membership, organisation, investment policies, role to developing countries; BRIC, New Development Bank(NDB); Asian Infrastructure Investment Bank(AIIB)

Unit IV: Trade Policies in India

Trade policies and trade policies in India during the last five decades; recent changes in the direction and composition of trade and their implication; Rationale and impact of trade reforms since 1991 on balance of payments, employment and growth; Working and regulations of MNCs in India; Instruments of export promotion and recent import and export policies and agenda for future, Factors responsible Impact of global Recession on the Indian Economy; Stimulus packages in India- Monetary Action, Fiscal package; Recovery of Global economy; india's recovery from recession.

Unit V: Trade Organizations

Genesis of GATT- GATT Rounds, Emergence of the WTO, Ministerial Conferences, and Issues related to GATS, TRIPS, TRIMS; IMF, IBRD, IFC, EFTA, SAARC, GCC and NAFTA, UNCTAD and Role of G8, G20 and BRIC, Policy implications with reference to India.

Reading List

1. Bhagwati, J. (Ed.) (1981), International Trade, Selected Readings, Cambridge, University Press Massachusetts
2. Carbaugh, R.J. (1999), International Economics, International Thompson Publishing, New York
3. Chacholiades, M (1990), The Pure Theory of International Trade, McGraw Hill.

4. Cherunilam F, International Economics, Fifth Edition, the Tata McGraw-Hill Companies, 2011
5. Dunn, R.M. and Mutti, J.H (2000), International Economics, Routledge Publishers, London
6. Kindleberger, C.P. (1973), International Economics, R.D. Irwin, Homewood.
7. King, P.G. (1995), International Economics and International Economic Policy : A Reader, McGraw Hill International, Singapore.
8. Paul, R. K & Obstfeld, M (1999), International Economics: Theory and Policy, Addison-Wesley
9. Salvatore D (1998), International Economics, Prentice Hall.
10. Sodersten, Bo (1991). International Economics, The Macmillan Press.
11. Batra, Raveendra N. (1975). The Pure Theory of International Trade under Uncertainty, The Macmillan Press Ltd., London.
12. Carbough, R.J. (1999). International Economics, International Thompson Publishing, New York. 3. Cherunilam, Francis (1988). International Economics, Tata McGraw-Hill Publishing Co. Ltd., New Delhi.
13. Dana, M.S. (2000). International Economics: Study, Guide and Work Book, Routledge Publishers, London.
14. Dunn, R.M. and J.H. Mutti (2000). International Economics, Routledge Publishers, London.
6. Ellsworth, P.T. and J.C. Leith (1975). The International Economy, The Macmillan Company, New York.
15. Haberler, G. (1937). The Theory of International Trade, Macmillan & Co. Ltd., London. 8. Heller, H. Robert (1968). International Monetary Economics, Prentice-Hall of India Pvt. Ltd., New Delhi.
16. Johnson, H.G. (1967). International Trade and Economic Growth, Harvard University Press, Cambridge.
17. Kemp, K.C. (1964). The Pure Theory of International Trade, Prentice Hall, New Jersey. 11. Neihans, J. (1984). International Monetary Economics, John Hopkins University Press, Baltimore.
12. Salvatore, D. (1997). International Economics, Prentice Hall, New York.

Course Code: DCE-6
Dissertation & Viva- Voce
(Internal Examination)

This, specific learning outcomes, model question papers and format to prepare dissertation (both at PG level) are the other major components of the new CBCS syllabus. The aim of the dissertation is to provide experiential learning through active participation that enables the student to develop and demonstrate analytical, judgmental, presentation and communication skills. A model format given along with the syllabus provides guidelines to write a thesis scientifically.

DISSERTATION FORMAT

Dissertation: Master of Arts (M.A.) in Economics

General Guidelines

1. Selection of a Topic
2. Pilot Survey, if needed
3. Significance of the Study
4. Review of Literature
5. Research Gap (Optional)
6. Conceptual Framework – Conceptualization & Operationalization (precise and specific meaning of the terms and concepts)
7. Theoretical framework (Optional)
8. Formulation of Research Questions /Issues
9. Research objectives
10. Hypotheses (Optional)
11. Coverage (Universe/ Sample & period of study)
12. Data source (Primary/Secondary)
13. Tools of analysis (Analytical Framework)
14. Social Relevance of the study
15. Limitations of the study
16. Chapter outlines
17. Introductory chapter
18. Result Chapter(s)
19. Conclusion Chapter
20. Appendices
21. Bibliography /References

Structure of the Report

- Title page 1 Cover Page
- a) Title page
 - b) Title of the project
 - c) Name of the candidate
 - d) Name and designation of the supervisor.
 - e) Degree for which project is submitted.
 - f) Month and year the project is presented
 - g) Declaration of the student & supervisor

1.2 Preface

- 1.3 Table of contents
- a) List of Tables
 - b) List of Figures
 - c) Glossary.
 - d) List of abbreviations
 - e) Acknowledgment

Course Code: GE-2

Indian Economic Development and Policy

Objectives: The aim of the paper is to teach the students about Indian Economy in historical perspective. It will enable them to understand the current economic scenario and their routes in history and global perspective.

Unit-I: Economic Development, Structural Change and Poverty

Approaches to economic development and its measurement – sustainable development; Role of State, market and other institutions; Indicators of development – PQLI, Human Development Index (HDI), gender development indices - Objectives and strategy of planning; Failures and achievements of Plan, Role of state and the market, planned economic development, development strategy after independence; Indian economic growth, distribution and structural change since independence; Poverty and Inequality trends and policies, Evolution of economic reforms.

Unit-II: Public Finance, Demography and Social Sector

Indian Public Finance- Recent fiscal trends revenue, expenditure and fiscal imbalance, Fiscal reforms, Issues in fiscal federalism, Demographic features and trends- Broad demographic features of Indian population; Rural-urban migration; Urbanization and civic amenities;, National population policies; Social Sector- Issues in Health and Education.

Unit-III: Agriculture, Industry and Service Sectors

Indian Agriculture- Land reforms, Agricultural price policy, Agricultural finance, Food Policies in India, Agriculture and WTO; Industrial Sector- Industrial Growth and diversification after 1991, Public Sector Enterprises and their performance, New Industrial Policy and its impact, Importance and performance of MSME (SSI); Performance of service sectors.

Unit-IV Finance and External Sector

Finance and development-Monetary Policy, structure and reforms in banking and financial sector; Trade and Investment-Structure and direction of foreign trade, International trade policies and liberalization, Capital account convertibility and FDI, Globalisation of Indian economy; W.T.O. and its impact on different sectors of the economy; Need for and issues in good governance; Issues in competition and safety nets in Indian economy.

Reading List

1. Bhagwati Jagdish and Arvind Panagariya (2013): Why Growth Matters: How Economic Growth in India Reduced Poverty and the Lessons for Other Developing Countries, Public Affairs.
2. Bhalla, G.S. (2007): Indian Agriculture since Independence, New Delhi: National Book Trust.
3. Byres, T.J. (1998) (Ed.): The Indian Economy: Major Debates since Independence, OUP, Delhi
4. Bardhan, P.K. (1999): Political Economy of Development in India, OUP, ND.
5. Chakravarty, S. (1987): Development Planning: The Indian Experience, OUP, ND.
6. Dantwala, M.L. (1996): Dilemmas of Growth: The Indian Experience, Sage, ND.

7. Drèze J. and A.K. Sen (2013), *Uncertain Glory: India and Its Contradictions* by, Princeton University Press.
8. Kapila, Uma (2015): *Indian Economy: Performance and Policies: 2015 – 16*, Academic Foundation.
9. Kapila, Uma (Ed) (2014): *Indian Economy since Independence*, 25th edition, Academic Foundation, Delhi.
10. Nagaraj R (Ed) (2012): *Growth, Inequality and Social Development in India: Is Inclusive Growth Possible?*, London, Palgrave Macmillan
11. Panagariya Arvind (2008): *India: The Emerging Giant*, Oxford University Press
12. Ray Partha (2013): *Monetary Policy*, Oxford India Short Introductions, OUP, New Delhi
13. Sandesara, J.C. (1992): *Industrial Policy and Planning, 1947-91: Tendencies, Interpretation and Issues*, Sage, ND.
14. Srivastava, D.K. (2005): *Issues in Indian Public Finance* New Century Publications, Delhi
15. Tendulkar, S.D and T.A. Bhavani (2007): *Understanding Reforms- Post 1991 India*, OUP.
16. Vaidyanathan, A. (2010): *Agricultural growth in India: Role of technology, incentives and institutions*, New Delhi: Oxford University Press.