MASTER OF ARTS IN ECONOMICS Course Code -10304

Year/ Semester	Category	Paper Code	Title of the Paper	Maximu m Marks
l Year 1 st	Core	1310304101	History of Economic Thought	100
	Core	1310304102	Principles of Public Finance and Fiscal Policy	100
	Core	1310304103	Microeconomic Theory	100
Semester	Core	1310304104	Macroeconomic Theory	100
l Year 2 nd Semester	Core	1310304105	Economics of Development and Growth	100
	Core	1310304106	International Trade	100
	Core	1310304107	Economics of Agriculture	100
	Core	1310304108	Problems of Indian Agriculture	100
	Core	1310304109	Budgetary System with special reference to India	100
II Year 3 rd Semester (Any Five) Select Elective papers to be offered by DDCE	Elective	1310304201	Mathematical Economics	100
		1310304202	Econometrics	100
		1310304203	International Economics	100
		1310304204	International Economic Relations	100
		1310304205	Managerial Economics	100
		1310304206	International Monetary Management	100
		1310304207	Cooperation Principles and Management	100
		1310304208	Problems of co-operation in India	100
		1310304209	Economics of Public Sectors in India	100
		1310304210	Business Economics and Environment	100
		1310304211	Planning and Regional Economics	100
		1310304212	Rural Development	100
		1310304213	Organizational Behavior	100
II Year 4 th	Core	1310304110	Banking and Monetary Management	100
	Core	1310304111	Regional Economics	100
Semester	Core	1310304112	Dissertation with Viva voce	200
			Total	1800

M.A. ECONOMICS UNDER CBCS (With effect from 2013)

1st SEMESTER

Paper-1: History of Economic Thought

Unit-I

- 1. Mercantilism- Leading Ideas, their balance of trade, doctrine the specific flow mercantilism.
- 2. Physiocracy- The natural order, the net product, Circulation of wealth, Trade and Taxation. Unit-II $\ensuremath{\mathsf{Unit-II}}$
 - 3. The English Classical School- Adam Smith's theory of Value, Distribution and growth, Ricardo's theory of value, Distribution and growth of international trade, Malthus theory of population and gluts, Say's Law of markets.
 - 4. J.S Mill and A. Nassan Senior.

Unit-III

- Critics of Classical Economics- Rise of Socialist Ideology, Scientific and Utopian Socialism (Sismondi, St. Simon, Charles Fourier, Louis Blanc, Proudhon) Marx's Scientific Socialism, Lenin's Contribution to the growth of Scientific Socialism.
- 6. Reaction against Classicism; German Historical School- R. Friedrich List.

Unit-IV

- 7. The Development of Marginal Utility Economics- Jevons, Welts and Mathematical School.
- 8. The Austrian School- Menger, Wiser, Bohm Bawerk.
- 9. Neo-Classicism- Marshall: His important contributions.
- 10. Wickshell and Swedish School.

Unit-V

- 11. Keynesian Ideas on Employment and Income- Influence of Keynesian Ideas.
- 12. Economic thinking of Naroji, Gokhle and Gandhiji.

Reference:

- 1. A History of Economic Doctrines- Gide and Rist
- 2. A History of Economic Thought- Erich Roll
- 3. History of Economic Doctrine- A. Gray
- 4. History of Economic Thought- Haney
- 5. The Socialist Tradition- A. Gray
- 6. Economic Theories in Retrospect- M. Blaug
- 7. The Great Economist- J. H Schumpeter
- 8. Development of Economic Analysis- J. H Rina
- 9. Dadabhai Naroji and the Drain Theory- B. N. Ganguly
- 10. Gandhian Economic Philosophy- S. N. Jha
- 11. Theory of Surplus Value- K. Marx
- 12. Scientific Socialism- Emila Denham, (PPH) New Delhi
- 13. Imperialism: The Highest State of Capitalism- V.I. Lenin

Paper-2: Principles of Public Finance and Fiscal Policy

Unit-l

1. Classical and Modern concept in Public Finance, Private and Public goods externalities and the role of the government, optional allocation between the public and private sectors.

Unit-II

 Public Expenditure: The nature of public expenditure, The rise of public expenditure, Pigou's ability of pay approach voluntary exchange theory, Bowen's model, the Lindahl-Johnson approach, the Samuelson solution, Trends in Public Expenditure Wagner's Law- Public expenditure under Socialism- Efficiency, Control and limits of Public expenditure- Effect of public expenditure on production, employment distribution and size of the national income, Welfare aspects of public spending.

Unit-III

3. Public Revenue: Classification of Tax- Principles of Taxation, Concept of nationality in taxation, Taxable Capacity, Concept of Tax burden and incidence, theories of shifting-Ricks and Musgrave's views on shifting, excess burden of indirect taxes, Joseph's Hocks thesis, taxable capacity static and dynamic view, taxation as an instrument of socio-economic change, study of taxes, income tax, death duty, consumption, taxation, wealth tax etc.

Unit-IV

- 4. Public Borrowing: Trends in public debt, burden of public debt, economics of public debt, retirement of public debt, traditional debt and G/P debt, management and economic stability, Public borrowing and development finance.
- 5. Budget: Purpose and Principles of budgeting, Budget as an instrument of economic policy, types of budget, programme budgeting.

Unit-V

- 6. Fiscal Policy: Fiscal policy as an instrument of stabilization of grow-pump-priming, compensatory sending-functional finance, fiscal policy and inflation control, fiscal policy and economic development- budgetary policy and growth.
- 7. Fiscal Federalism: Distribution of revenues with special reference to India, Co-ordination of financial policy between centre and State.

Reference:

- 1. The Theory of Public Finance- R.A. Musgrave
- 2. Government Finance (Economics of the Public Sector)- J.F Due and F. Friedlander
- 3. Modern Public Finance- B.P. Herber
- 4. A Study of Public Finance- A. C. Pigou
- 5. Financing Government-M. A. Groves
- 6. Public Finance in Underdeveloped Countries- A. R. Priest
- 7. Public Finance and Fiscal Policies- Allan Williams
- 8. Economics of Co-Public Expenditure- T. Mathew
- 9. Economics of Control Chapters on functional finance- A. P. Lerner

Paper-3: Micro Economic Theory

Unit-I

1. Theory of consumer behavior: Marshallian utility analysis, Indifference curve analysis: their Properties, equilibrium of the consumer, responses to price and income changes, income and substitution effects, Revealed preference analysis. Hick's revision of demand theory.

2. Theory of Production: Isoquants-Marginal rates of technical substitution, Production function, Law of variable proportions, Returns to Scale. Expansion path, least cost combination of factors, Linear programming.

Unit-II

- **3.** Cost of production and Cost Curves: Cost in the short run, the short run cost curve, long run AC curve, its shape and its explanation.
- 4. The Theory of Product Pricing: Equilibrium of the Firm and Industry, Pricing and output in perfect competition, short run and long run equilibrium of the firm and Industry under perfect competition ability of the profit maximization hypothesis.

Unit-III

5. Monopolistic and Imperfect Competition : Meaning and future, pricing and output determination, group equilibrium, product variation, selling costs and equilibrium in under monopolistic competition, the doctrine of excess capacity, consequences of monopolistic competition.

Unit-IV

- 6. Monopoly: Definition, price and output determination, comparison of monopoly equilibrium and perfectly competitive equilibrium, discriminating monopoly and the degree of price discrimination, pricing and output under discriminating monopoly, moral and price discrimination, measurement of monopoly, power control of monopoly.
- 7. Monopoly: Pricing and output exploitation of labour under different market situations. Oligopoly: Problems in the theory of oligopoly, pricing under oligopoly. The case of joint profit maximization, perfect, cartel, kinked demand curve and price leadership.

Unit-V

- **8.** Theories of Distribution: Marginal Productivity theory, Euler's theorem and adding up problem. Theories of wages, interest, profit macroeconomic models of distribution.
- **9.** Welfare Economics: Welfare economics-classical welfare economics, contributions of Marshall and Pigou- a critical appraisal Paretian welfare economics, conditions of paretian optimum perfectly competitive economy and the paretian optimum. New welfare economics compensation principle. Hicks Kaldor Criterion, Scitovsky's double criterion, criticisms of the compensation principle. Bergson-Samuelson Social Welfare function.
- **10.** General Equilibrium Theory.

- 1. Value and Capital -J. R. Hicks
- 2. A Revision of Demand Theory-J. R. Hicks
- 3. Economics of Imperfect Competition-Joan Robinson
- 4. Theory of Monopolistic Competition-E. H. Chamberlin
- 5. Economics Theory and Operational Analysis-W. J. Boumal
- 6. Economics of Welfare (Part-II)- A. C. Pigou
- 7. Principles of Economics-A. Marshall
- 8. Price Theory- Bain
- 9. Reading in the Theory of Income Distribution-A. E. A
- 10. Readings in Price Theory (A. E. A)-Stigler and Boulding
- 11. A Critique of Welfare Economics-I. M. D. Little
- 12. Studies in the Theory of Economics-M. W. Redder
- 13. Reappraisal of Welfare Economics-S. K. Nath
- 14. Essay on Value and Distribution-N. Kaldor
- 15. Welfare and Competition- Scitovsky

Paper-4: Macro Economic Theory

Unit-I

- 1. Classicists vs. Keynes- Unemployment controversy, Interest rate controversy, Money neutrality and dichotomy controversy.
- 2. Consumption- Consumption function: Absolute income Hypothesis, Relative Income Hypothesis, Permanent Income Hypothesis and Life Cycle Hypothesis. Determinants of consumption function- Rate of interest, price level, distribution of income, wealth and financial assets, Cyclical and Secular Consumption function.

Unit-II

- **3.** Multiplier Theory- The static multiplier, the dynamics multiplier, the super multiplier, the employment multiplier, the foreign trade multiplier, the balanced budget multiplier, the money multiplier.
- **4.** Investment-Present value criterion for investment, Marginal Efficiency of investment, Present value and marginal efficiency, Theories of investment the accelerator theory and the profit theory.

Unit-III

5. Money and Interest- General Equilibrium of the product and markets. The IS and LM functions and the wage- Price flexibility, Keynes effect and Pigou effect- a neoclassical Critique.

Unit-IV

6. Rational Expectations, Supply side economics- The Laffer Curve, Decline of Keynesianism.

Unit-V

- 7. Theory of Inflation- Definition and measurement, Demand-pull, Cost-push and structural hypothesis wages, price and productivity, Inflation Control and Phillip's curve. Expectations and Inflation, Indexation.
- **8.** Trade Cycle Theories- Monetary theories, Over investment theories, Keynesian theory, Contributions of Schumpeter, Samuelson, Hicks and Kaldor.
- **9.** Macroeconomics Policies- Financial Intermediaries and the monetary policy, Keynesianism Vs. Monetarism, A synthesis of monetary and fiscal policies.

Reference:

- 1. Macro Economic Analysis- Edward Shapiro
- 2. Macro economic Theory and Policy-Micbael R. Edgamund
- 3. Macro economic Theory and Policy-William H. Branson
- 4. Macroeconomic-Robert L Crouct
- 5. Macroeconomic Theories- (Ed)- M.J.C. Surrey
- 6. Macroeconomic- Brueman
- 7. Macroeconomic Theory-Ackley
- 8. The Economics of Cycle and Growth-Stanley Bobber
- 9. Readings in Macroeconomic-(Ed)-Mueller
- 10. Keynesian Dynamics-K.K. Kurihara
- 11. The Economics of J.M. Keynes-D. Dillard
- 12. Inflation (Ed)-Ball and Doyel (Penguin)
- 13. On Keynesian Economics and the Economics of Keynes-Axel Leijonhufvud
- 14. The Economics Of Inflation-Trevithik & Mulvey
- 15. Money in a Theory of Finance-Gurley and Shaw

2nd SEMESTER

Paper-5: Economics of Growth and Development

Unit-l

- 1. Rostow's Stages of Economics Growth-Take off and India, Rostow Vs. Marx
- **2.** Theories of Economic Growth-Keynesian and Post Keynesian, theories of growth: Harrod -Domar Model, Robinson's Model, Mead's Model, Solow Model, Kaldor Model.

Unit-II

- **3.** Strategies of Development- Lewis model with unlimited labour supply, Leibenstein's theory of critical minimum effort, Rosenstein Roden's Big-Push theory, Balanced Vs.-Unbalanced growth, Nurkse Vs. Hirschman thesis, Singer's critique
- 4. Technique of Development- Planning and Plan Models –Aggregate Models and Sectoral models- Mahalanobis model, Input-output model, Accounting Prices capital output ratio, linear Programming and Optimization or plan goals and the plan Theory.

Unit-III

 Capital formation and Economic Development – Nurkse's analysis of vicious circle of poverty, process and measures of capital formation, disguised unemployment and saving potential.

Unit-IV

- **6.** Planning Problems and Policies of Development Planning, investment criteria, choice of technique: Sen's analysis, Technologies dualism, appropriate technology for developing economy, Schumacher's intermediate Technology International Transfer of technology.
- **7.** Regional Planning-Strategy from Regional Planning, Regional imbalance and the measures to reduce it, regional imbalance during plan periods, policy for balanced regional development.

Unit-V

8. Human Capital Planning, Evolution of the Concept, Sources of human capital formation, Role of human capital in economic development.

Reference:

- 1. Theory of Crown and Development-Imra Adelman
- 2. Economic Development-Meir and Baldwin
- 3. Economic Development-Kindleyberger
- 4. Keynesian Theory of Economic Development-Kurihara
- 5. Problems of Capital Formation for Underdeveloped Countries-R. Nurkse
- 6. Economic Development-B. Higgins
- 7. Strategy of Economic Development-A. O. Hirschman
- 8. Choice of Techniques-A. K. Sen
- 9. Leading Issues for Economic Development-Meir
- 10. Economics of Underdevelopment-Agarwal and Singh
- 11. Accelerating Development in Underdevelopment Economics- Agarwal and Singh
- 12. Theory of Economic Growth-Lewis
- 13. Growth Economics- A. K. Sen
- 14. Growth Theory of Ex-Position-R. M. Follow
- 15. The Stages of Economic growth-Rostow
- 16. Economic Theory and Underdeveloped Regions-Gunnar Myrdal
- 17. Economic Backwardness and Economic development- Leibenstein
- 18. Essays on Economic stability and Growth-N. Kaldor

Paper-6: International Trade

Unit-I

- **1.** The Basis of International Trade, Comparative cost Theory, Heckscher-Ohlin Trade Theory. Leontief Paradox –Factor Price Equalization Theories.
- **2.** Demand conditions in international Trade Theory- Reciprocal Demand Theory- Marshall Edge worth, Offer Curve technique, Term of trade affecting terms of trade.

Unit-II

- **3.** The Gains from trade
- **4.** Transport Rent International Trade.
- **5.** Trade and Welfare; Theory of optimal tariff. Theory of Effective protection, Theory of Customs Union.

Unit-III

6. International Trade and Economic Development.

Unit-IV

- 7. Foreign Exchange Market: Demand and supply of Foreign Exchange, Flexible Exchange Rate, Spot and Forward markets for foreign Exchange, Fixed Exchange rate.
- 8. Foreign Exchange Rate: Purchasing Power Parity Theory, Balance of Payment Theory.
- **9.** Balance Payment and its adjustment, national income and balance of payment. Balance of International Payment. Disequilibrium in International payment. Adjustment mechanism under flexible exchange rates. Tariffs, Import controls, multiple exchange rates as instruments of balance of Payment policy. Internal and external balance.

Unit-V

- **10.** The Theory of Capital Movements. The transfer problem and the optimum amount foreign investment.
- **11.** Commercial Policy
- 12. The international Monetary Fund: Reforms of the International Monetary system

Reference:

- 1. International Economics: Analysis and Issues- Charles E. Stanley
- 2. International Economics-Rober A. Mundell
- 3. International Economics-Bo Soderstein
- 4. Studies in the Pure Theory of International Trade- Raveendra N. Batra
- 5. International Trade and Development-G. M. Meir
- 6. International Economics-Haberler
- 7. International Economics-Kindleberger
- 8. Trade and Economic Structure-R. E. Caves
- 9. Readings in the Theory of International Trade (Ed.)-Caves and Johnson
- 10. International Trade-Jagdish Bhagwati

Paper-7: Economics of Agriculture

Unit-I

- 1. Role of Agriculture in economic development.
- 2. Agricultural Production and resource use:

Production functions, returns to scale, resource allocations under competitive conditions. Resource substitution of factor relationship. Cost and supply curves factor combination and solution techniques under uncertainty system of framing, choice of product, relationship among product and adjustment of production and resource use to uncertainty.

Unit-II

- **3.** Factors: Principle of land utilization, land and tenancy, land reform, land values and rent, land taxation, labour market, wages and employment and under employment.
- 4. Capital Market, Savings and Capital formation, characteristics of agricultural credit, types of credit, sources of credit, agencies of credit, co-operative credit.

5. Agriculture Markets: the market structure, marketing functions, marketing costs, organization of markets, co-operative marketing.

Unit-III

6. Agricultural price, nature of demand for and supply of agricultural product, movements of price, long period and short period cyclical and seasonal variations, stabilization of price.

Unit-IV

7. State in relation to agriculture: Problems in agricultural Policy, State intervention in agricultural marketing, Stabilization of price and income protection of farm wages, planning in agriculture.

Unit-V

8. International trade in agricultural commodities, commodity agreements, international programme for agricultural development.

Reference:

- 1. Land Economics-Renne
- 2. Progress of Land Reforms-U.N.O
- 3. Economics of Agricultural Production and Resource Use-Heady
- 4. Economic Organisation of Agriculture-Schultz
- 5. Introduction to Economics of Agriculture-Black
- 6. Economics of Agriculture-Cohen
- 7. Introduction to Agricultural Economic Analysis-Bishop and Toussiant
- 8. Agricultural Credit-Belshaw
- 9. Agricultural Price-Thompson and Foots
- 10. Readings in Agricultural Development (Ed.)-Khurgo
- 11. Agriculture in Economic Development (Ed.)-Eicher and Witt
- 12. Readings in Agriculture-Pramit Choudhury
- 13. Agricultures in an Unstable Economy-Schultz
- 14. Agricultural Price and Income Policy- Schultz
- 15. Marketing of Farm Products-Shepherd

Paper-8: Problems of Indian Agriculture

Unit-I

1. Indian agriculture problems and policies, land utilizations, land tenure, tenancy agrarian reforms and structural change in India, Agricultural production in India, system of farming, size of farms, productivity and economic efficiency in agricultural industry.

Unit-II

- 1. Agricultural finance in India, features of credit systems, types of credit, sources of credit, agencies of credit, co-operative credit, problem of capital formation in Agriculture.
- 2. Agricultural marketing in India, the market structure, organization of markets, cooperative marketing.
- **3.** Agricultural prices in India, movement of prices, stabilization of prices, pricing policy, agricultural growth and stability.

Unit-III

1. Agricultural labour, problem of agricultural labour, Agrarian unrest, employments situation and wages.

Unit-IV

2. State policy towards agriculture in India. Food policy, taxation of agricultural land and income.

Unit-V

1. Agricultural development under the different plan periods, new agricultural strategy, Technological change and productive, green revolution.

Reference:

- 1. Indian Rural Problems-Nanavati and Anjaria
- 2. Report of the National Commission on Agriculture in India, 1976
- 3. Report of the Rural Credit Survey of India (Vol-II-1964, Reserve Bank of India)
- 4. Report of the Rural Banking Enquiry Committee, 1951
- 5. Co-operative Movement in India-Hough
- 6. Indian Agriculture, 1st Fluctuating Fortress-S. P. Sinha
- 7. Report of the Food Grains Enquiry Committee, 1956
- 8. Report of the Irrigation Commission, 1972
- 9. Technological Change and the Distribution of Grains in Indian Agriculture-Ch. H. Rao
- 10. Agriculture Production of India-C. B. Memoria
- 11. The Green Revolution in India-B. Sen
- 12. Report on Agriculture Census of India, 1970-71
- 13. Land Reform in Principle and Practice-Warriner
- 14. Land Reform and Economic Development-Peter Droner

Paper-9: Budgetary System with special reference to India

Unit-I

1. Budgetary System: Making of Budgets, Social accounting and income calculation, budgetary policy and national income determination.

Unit-II

- 2. Normative principles of public expenditure and taxation, decision making process and institutional choices.
- 3. The effects of budgetary measures on resources allocation, distribution of income and wealth, aggregate expenditure and economic growth.

Unit-III

- 4. The relation between government budget and national plans, role of fiscal policy in resource mobilization for development.
- 5. Budgetary under federal set-up, budgeting at national level and regional levels and their co-ordination performance, budgeting, budget classification, analysis and interpretation budgeting and plans..

Unit-IV

6. Broad trends of Indian budget and Orissa budgets during the plan period, budgetary trends, important testure, major components of revenue and expenditure, budget as an instrument of social and economic policy.

Unit-V

7. Budget Cycles: (with reference to India and Orissa) Budget formation, legislative encashment implementation of public accounts committee, estimates, committee efficiency and accountability of the present system of budgeting suggestions for improvement.

- 1. Public Spending-R. K. C. Kean
- 2. Government Budgeting and Economic Planning in Developing Countries- U. N.
- 3. A Manual for Economic and Functional Classification of Government Transaction-U. N

- 4. State Finance in India-L. V. Kataran
- 5. S. C. P. Orissa Finance in Perspective
- 6. Control of Public Expenditure-A. Premchand
- 7. Indian Federal Finance and Budgetary Policy-B. N. Gupta
- 8. Fiscal Policy in the Contest of Planning-B .N. Mishra
- 9. National Planning-ASSO, (USA) Annual Budgeting and Development Planning.

3rd SEMESTER (ELECTIVE PAPERS) (Any Five) Paper-10, 11, 12, 13, 14

Mathematical Economics

Unit-I

1. Theory of consumer Behaviour: Marshallian demand analysis, Indifference curve analysis, Slutsky equation, Comparative static theorems, Theory of Revealed Preference.

Unit-II

- 1. Theory of the Firm: Production and cost function, Homogeneous production functions, Euler's theorem, Cobb-Douglas production function, CES production function, Characteristics of production possibility sets, Duality relationship between production and cost functions, Comparative static result, Joint production.
- 2. Market Equilibrium: Factor market equilibrium, Stability of equilibrium.

Unit-III

- 3. Linear Programming: Basic theorems, theory of the Simplex method (non-degeneracy excluded), Duality theorems, Complimentary slackness theorem.
- 4. Non-linear Programming: Kuhn-Tucker optimality criteria, Kuhn-Tucker results and saddle points with special reference to concave programming.

Unit-IV

- 1. Theory of Games: Two person-Zero-sum game, Saddle point, Pure and mixed strategies, Equivalence of matrix game and linear programming, Rectangular game and its solution.
- 2. The Leontief System: Static input-output analysis, Hawkins-Simon theorem, A linear programming interpretation, Theorem on non-substitution.

Unit-V

- 1. Theories of Economic Growth: Harrod-Domar Model, Neo-classical model of Solow, Neo-Keynesian model of passineti, two sector model of Uzawa, Optional economic growth- Ramsey problem.
- 2. Multisector Growth Models: Von-Neumann growth model, concept of efficiency and optimization for Von-Neumann model, Turnpike Theorems- Samuelson, Turnpike result.

Reference:

1. Micro Economic Theory-Henderson and Quandt

- 2. Mathematical Theories of Economic Growth-Burmister and Dobell
- 3. Economic Growth-Henry C. Wand
- 4. Growth Economics (Ed.)-A. K. Sen
- 5. Linear Programming-R. I. Gas
- 6. Linear Programming and Economic analysis-Dorfman, Samuelson and Solow
- 7. Theory of Linear Economic Models-David Gale
- 8. Activity analysis of Production and Allocation(Ed.)-T. C. Koopmans
- 9. Three Essays of the State of Economic Science- T. C. Koopmans

Econometrics

Unit-I

- 1. The Econometric Approach
 - (i) Meaning and objectives of Econometrics.
 - (ii) The sources of hypothesis used in Econometrics.
 - (iii) The raw materials of econometrics- Time series and Cross section data: the problem of their pooling together.
- 2. Elements of Statistical inferences.
 - (i) Point and interval estimation- estimator and its properties, Method of Maximum Likelihood, interval Estimation- confidence interval.
 - (ii) Test of Hypothesis- Simple and composite hypothesis, two types of errors, Neyman-Pearson Lemma, Power Function of a test, Likelihood ratio, Test Exact Sampling Distributions, Z-statistics, Chi-square, t-statistics and F-statistics.

Unit-II

- 3. Classical Linear Regression (with one explanatory variable)
 - Assumption and their economic interpretation, Least square estimations of regression parameters, their properties, Gauss-Markov Theory, Theorem: Standard errors of estimates. Estimator of errors, Control limit theorem, Maximum likelihood estimator.
 - (ii) Normality of errors, control limit theorem, Maximum Likelihood Estimator.
 - (iii) Significance test and confidence intervals of estimates-z-test, t-test and f-ratio test.
 - (iv) Prediction point and interval.
- 4. Extension of the two variable linear model:
 - (i) Three –variable linear model, the coefficient of multiple correlation, partial correlation coefficient.
 - General Linear model (with K- Explanatory variable)- Assumptions, Least-square estimates and their properties, Variance- covariance matrix of estimates, Estimates of error variance, Multiple coefficient of determination-R² and multiple correlation co-efficient- R. Significance test and confidence intervals, prediction.
 - (iii) Non-linear Models-Choice of functional forms, estimation.

Unit-III

(i) Extensions of the general model: Dummy variables, Use of dummy variable in seasonal analysis, dummy dependent variable.

Unit-IV

- (i) Violations of the assumptions of the classical model.
- (ii) Errors in variables consequence, Methods of estimation-classical method of maximum likelihood, use of instrumental variable.

- (iii) Autocorrelation –Sources, Consequences, GLSM. Tests for autocorrelation, Remedial measures, Prediction.
- (iv) Heteroscedasticity- Nature and consequences, Heteroscedasticity structures, Tests for Heteroscedasticity, Remedial measures the methods of weighted least square.
- (v) Multicolinearity- Implications consequences, Tests for multicolinearity, Methods of estimation Multicolinearity and prediction, Remedial measures.

Unit-V

- 1. Distributive Lag Models: Lagged exogenous and endogenous methods, consequences of applying OLMS to lagged and generous model. Estimation of distribution log models-KOYCK's approach, Adaptive expectation, Use of instrumental variable, Almon's approach.
- 2. Simultaneous Equations Methods.
 - (i) Jointly dependent and predetermined variables, structural form reduced form, final form.
 - (ii) The identification problem- Rank and order conditioned.
 - (iii) Methods of Estimation- Method of Indirect least squares 2 LS, Method of instrumental variable MLIML, 3 SLS and FIMLM.

Reference:

- 1. Econometric Methods-Johnson
- 2. Elements of Econometrics-J. Kemonta
- 3. Introduction to Economics-Henry Theil
- 4. Econometric Models, Techniques and Applications-Michael D. Intriligator
- 5. Theory of Econometrics-A.K Koutsoyiannis
- 6. Basic Econometrics-Damodar Gujarati
- 7. Statistics-Taro Yamane
- 8. An Introduction to Econometrics-L. R. Klein
- 9. Statistical Methods of Econometric Analysis-Nagar and Sharma

Unit-I

International Economics

1. Economic Growth and International Trade: Growth and Trade when growth is unspecified, formal model of economic growth and international trade, increases in factor endowments and international trade, technical progress and international trade, economic growth, International trade and inter movement of factors; a dynamic analysis of pattern of specialization and factor accumulation.

Unit-II

- 2. Economic expansion and the terms of trade; The British School Premises hypothesis.
- **3.** Intermediate products and international trade; implications of inter-industry flows and pure intermediate products.

Unit-III

4. International Trade and factor market distribution with wage differential with factor immobility and factor price rigidity.

Unit-IV

5. International Trade with product market imperfections, the theory of monopoly in general equilibrium.

Unit-V

6. International Trade with non-traded goods.

Reference:

- 1. Studies in the Pure Theory of International Trade-R. N. Batra
- 2. International Trade-Akira Takayama
- 3. International Economics-Bo. Soderstein
- 4. A Pure Theory of International Trade and Investment-M. C. Memp
- 5. International Trade (Ed.)-Jagadish Bhagawati
- 6. Readings in the Theory of International Trade (Ed.)-Caves and Johnson
- 7. Trade, Balance of Payments and Growth (Ed.)-J. N. Bhagawati
- 8. Money, Trade and Economic Growth-H. C. Johnson
- 9. International Trade and Development-G. M. Meir
- 10. Recent Developments in the Theory of International Trade-W. M. Corden

International Economic Relations

Unit-I

1. A short history of the international economic relations since 1989. Disintegration of the world economy-cause of disintegration –search for an international economic order. International institutions and agencies. I.M.F, GATT, the case for multilateral trade.

Unit-II

- 2. The Western European problems: Marshall plan, European Payments Union, European Economic Community: European Free Trade Association.
- 3. Problem of the sterling areas-Its history and mechanism as multilateral system.

Unit-III

4. Dollar Problem: Nature of the problem during the fifties and seventies; its effects.

Unit-IV

5. Problems of under developed countries: Trade relations between developed and underdeveloped countries. Foreign aid and economic development, commercial policy and economic development, Asian Development Bank.

Unit-V

6. International Commodity Agreement State Trading.

- 1. International Monetary Policy-W. M. Scawnell
- 2. International Monetary Co-operation-D. Tew
- 3. Gold and Dollar Crisis-R. Triffin
- 4. International Economy-Ellis worth
- 5. International Monetary Relations-Al. D. Yeger
- 6. International Economy-Kranse

Managerial Economics

UNIT-I

Introduction, Nature and Scope of Managerial Economics, Basic terms and concepts, Role of Managerial Economists in Decision making.

UNIT-II

Demand Analysis and Forecasting, Demand - Elasticity of demand, Demand Forecasting Techniques and methods.

UNIT-III

Production And Cost Analysis Production function, Types, Returns to Scale, Law of Variable Proportions, Cost-Volume-Profit analysis

UNIT-IV

Market structure and pricings profit planning and capital budgeting, Price and output decision under different markets - Various types of pricing - Price strategy and policy. Profit - Planning and strategies, profit maximization conditions - Process - cost of capital, capital rationing and profitability index

UNIT-V

Investment Decision and Capital Budgeting, Cost Benefit Analysis, Capital Budgeting Process, Comparison between NPV and IRR, Reviewing Investment Processes

Reference:

- 1. Managerial Economic- Dwivedi
- 2. Managerial Economics (PHI)- Petersen & Lewis
- 3. Managerial Economics (PHI)- Maheswari
- 4. Managerial Economics, (TMH)- G. S. Gupta

International Monetary Management

Unit-I

- 1. The Market for foreign Exchange: Demand for foreign exchange, supply of foreign exchange equilibrium rate of exchange.
- 2. The Balance of Payments: the Balance of trade, the balance of current accounts, the balance of payments, equilibrium and disequilibrium in the balance of payments, autonomous and accommodating capital flows, disequilibrium in the balance of payment.

Unit-II

3. Monetary systems and international Adjustment: Adjustment under flexible rate, direct controls, devaluation fixed vs. flexible exchange rate.

Unit-III

4. The international Monetary System: Gold Standard as an international standard- its working breakdown experience of the world after its breakdown, efforts to build a world monetary system, the Keynes and white plans, the Britain Woods system and its failures managed flexibility in action draw backs of the state.

Unit-IV

- 5. Regional Clearing system: The sterling area, the intra European payments agreements.
- 6. The Dollar Problem: Nature of the problem in the fifties and seventies: its impact on the world monetary system, the problem of international liquidity, the adjustment mechanism and the international monetary system.

Unit-V

7. Proposals for reforms of the international Monetary System: Flexible exchange rates revaluation of gold, Keynes Plan for a clearing union, the triffin plan, the Bernstein Plan,

Hard Caldor Tinbergen Plan, Special drawing rights under IMF international Monetary System and the developing countries.

Reference:

- 1. International Monetary Relations-L.D. Yeagor (Theory, History and Policy)
- 2. International Monetary Systems-Hebbest Grobat
- 3. International Monetary Policy-Scaurnell
- 4. International Monetary Co-operation-B. Lew
- 5. International Economics-Bo. Soderstein
- 6. International Finance (Ed.)- R. N. Cooper
- 7. Gold and Dollar Crisis-P. Triffin

Cooperation Principles and Management

Unit-I

1. Principles of co-operation: Meaning and features of co-operation, half way house between capitalism and socialism, origin and development of the Co-operative movement.

Unit-II

2. General features of co-operative societies- classification of co-operative societiesconsumers co-operation, producers co-operations, co-operative marketing Credit, Cooperation State and Co-operation.

Unit-III

3. The features of the co-operative Movement in England, German, Denmark and USSR. **Unit-IV**

4. Role of Co-operation in Social economic development

Unit-V

5. Principles of Management and the Co-operatives.

Reference:

- 1. The British Co-operative Movement in socialist society-G. L. M. Cole
- 2. Co-operation in the European Market Economics-(Asia Publishing House)
- 3. The Role of Co-operation in Social and Economic Development-(Asia Publishing House)
- 4. Law and Principle of Co-operation-H. Calvert
- 5. A Century of Co-operation-G. D. H. Cole
- 6. Co-operation in the Soviet Union-B. Baren

Problems of cooperation in India

Unit-I

1. The Co-operative Movement in India: Its origin and History, The Co-operative Credit, Societies Act of 1904 and 1912.

Unit-II

 Co-operative Credit: its nature and structure, the German Models, Aiffesen and Schulz delizech banks, limitations of credit societies, the land mortgage banks, recommendations of the rural credit survey(1951-1952) integrated schemes of rural credit, recommendations of the All India Rural Credit Review Committee, Reserve Bank of India and Co-operative Credit, Role of Co-operative Credit in increasing farm production.

Unit-III

3. Non-credit Co-operation: Agricultural Marketing Societies, Co-operative Stores, Weavers Co-operative Societies, Co-operative Consolidation of Holdings Societies, Co-operative farming Service Co-operative.

Unit-IV

4. Limitation of the Co-operative Movement in India.

Unit-V

5. The Place of Co-operative in the Five Years Plan.

Reference:

- 1. The Co-operative Movement in India-C. E. M. Hough
- 2. Co-operation in India-H. W. Wolfe
- 3. Experiment in Co-operative Farming-Agro-economic Research Centre, Viswa Bharati University, Shantiniketan
- 4. Farm Credit and Co-operatives in India-V. Tirupathi Naidu
- 5. Co-operation in India-Dr. B. S. Mathur
- 6. All India Rural Credit Survey Report
- 7. Review of the Co-operative Movement in India-RBI
- 8. Role of Co-operative in Increasing Farm Production-(1963-65)A Survey Report-The RBI

Economics of Public Sectors in India

Unit-I

- 1. The role of public sector in the economic development, trend of expansion of public enterprise in backward economics, public sector and regional development.
- 2. Management of public sector enterprises, departmental, companies and corporation, efficiency criteria and public accountability.

Unit-II

3. Criteria of project selection, specification of objective, investment planning pricing of labour, capital and foreign exchange, project evaluation, cost benefit analysis.

Unit-III

4. Economic of infrastructure: investment in infrastructure and economic development power, irrigation, roads and transport.

Unit-IV

5. Pricing policy of public enterprises: profit maximization and other financing of public enterprises.

Unit-V

 Study of the Board problems of the following major enterprises of India and Orissa (a) Indian Railways, (b) Hindustan Steel, (c) Orissa's Power Project, and Transport undertaking and irrigation project.

- 1. Public Investment Criteria-S. A. Marglin
- 2. Evaluation of Industrial Project-UNIDO
- 3. Public Enterprise (Ed.)-R. Turvey
- 4. Pricing and Fiscal Policies-Rosenstein Rodan

- 5. Public Enterprises and Economic Development-H. Hansen
- 6. Patterns of Public Sector in Underdeveloped Economy-Ignacy Sachs
- 7. Working of Public Sector-V. V. Ramnarayan
- 8. Managerial Problems of Public Enterprises-A. H. Hansen
- 9. Indian Railway Finance-V. V. Ramanathan
- 10. Evaluation Report on Public Sector Undertakings in Odisha

Business Economics and Environment

- Unit-1 Business Environment & Strategic Management: International Environment, External Environment, Political & Business Society, Social Responsibility of Business, Consumerism.
- **Unit-2** Economic Roles of Government: Monetary and Fiscal Policy, Industrial Policy, Privatisation, Industrial Sickness,
- **Unit-3** Globalisation and Liberalisation: Labour Welfare and Social Security, GATT & WTO,Competition Act, 2002.
- **Unit-4** Financial Environment: Financial Institution, RBI, Stock Exchange, Non Banking Financial Corporation, Capital Market Reform and Development.
- **Unit-5** Industrial Development Strategy and Growth under Indian Planning: Commodity Exchange and its Regulation, Price and Distribution Control, Concentration of Economic Power.

Reference:

- 1. Francis, Cherunillam : Business Environment and Government (HPH.)
- 2. Adhikary, M: Economic Environment of Business (Sultan Chand)
- 3. Agrawal & Diwan: Business Environment (Excel)
- 4. Daniel: International Business Environment and Operations (Pearson)
- 5. Michael V.P.: Business Policy and Environment (S.Chand)
- 6. Mishra & Puri: Indian Economy, 2006 Edition.
- 7. Dutt & Sundaram: Indian Economy, 2006 Edn.

Planning and Regional Economics

Unit-I

- 1. Concepts of planning objects: scope and rational of planning, planning under capitalism and mixed economy.
- 2. Regulations and controls under planning.
 - (a) Fiscal (b) Monetary (c) Administrative issue of nationalization.

Unit-II

3. Formulation of Development plans: Use of models, linear and non-linear programming, input-output analysis, physical and financial planning, planning in lance, perspective planning investment criteria, optional level of investment choice of sectors, projects, techniques and regions, allocation of resources, pricing in planning.

Unit-III

- 4. Federalism and planning: planning in federal state, regional balances planning agency and perfect preparation.
- 5. Regional Planning: Regional accounts, linear programming input-output analysis, area planning, comparative cost studies, industrial complex analysis, cost benefit analysis, system analysis.

Unit-IV

- 6. Plan mechanism at national and regional levels and their co-ordination, comparative cost studies, industrial complex analysis.
- 7. Plan mechanism at national and regional level and their co-ordination, planning commission, planning Boards, National Development Council, Mechanism of policy formulation at national and regional level.
- 8. Indian plans and Orissa Plans: Objectives, Allocations, Strategy, Finances and achievements interregional balances as strategies of development under five year plans.

Unit-V

9. Man power Planning: with reference to India and Orissa man power planning and economic development, Man power, Policy at National and regional levels under five year plans.

Reference:

- 1. Problems of Regional Economic Planning-J. R. Boudeville
- 2. Location and Regional Planning-L. Lefeber
- 3. Development Finances Planning and Control-U. Hicks
- 4. Regional Planning in India-M. C. Chand & V. K. Puri
- 5. Economic Planning-C. D. Baldwin
- 6. Pricing in Planned Economy-B. V. Krishnamurthy
- 7. Technique of Planning-S. S. Wagle
- 8. Essays on Economic Planning-O. Lange
- 9. Principles of Economic planning-W. A. Lewis
- 10. Five Year Plan of India and Orissa
- 11. Orissa Finances in Perspective-S. C. Pattnaik
- 12. Approaches to Dynamic Investment Planning-S. A. Marglin
- 13. Choice of Technique-A. K. Sen
- 14. Regional Planning-Balkrishna
- 15. Planning for Balanced Social and Economic Development-U. N. O
- 16. Central Planning-Jan Tinbergen
- 17. Economic Planning for Underdeveloped Areas-E. S. Mason
- 18. Education, Manpower and Economic Growth-F. Herbinson and C. A. Mayer

Unit-I

Rural Development

Need of Rural Development, Impact of Globalization, Sector of Rural Development-Agriculture, Diary, Fishery, Animal Resource Development

Unit-II

Development Strategies for Rural Development: PURA, Role of NGO in Rural Development,

Unit-III

Water Resource Management (Pani Panchayat), Self-Help Groups, Institutions for Rural Development, Rural Local Bodies.

Unit- IV

Rural Co-operatives, Rural Banking, Role of Bureaucracy in Rural Development, ORMAS.

Unit-V

Rural Development Programmes : MGNREGS, National Rural Livelihood Mission, Nation Rural Health Mission (NRHM), SGSY Sarva Sikshya Aviyan (SSA), Indira Awas Yojana (IAY).

Reference:

- 1. Rural Development in South Asia, Deep and Deep Publications, New Delhi- Khanna, B.S.
- 2. Rural Development: Learning from China, Macmillan Press Ltd., London and Basingstoke- Sartaj, Aziz
- 3. Development as Freedom, Oxford University Press, New Delhi- Sen, Amartya
- 4. Integrated Rural Development in Asia, Manohar, New Delhi- Aslam, M
- 5. Rural Development: Theories of Peasant Economy and Agrarian Change, Hutchinson University, London- Harris, J. (ed.)
- 6. Rural Development and the State, Metheun and Co. Ltd., London- Lea, M.A.D., Chaudhri, D.P. (ed.)

Organizational Behavior

Unit-I

Organizational Behaviour- Meaning, Nature and Challenges, Organizational: Structure and Design.

Unit-II

Organizational Culture, Organizational Development, Organizational Change

Unit-III

Management- Meaning, functions and Challenges of Managers, Motivation, Leadership, Communication.

Unit- IV

Conflict Management, Total Quality Management, Strategic Management and Management of Change.

Unit-V

Leadership, Importance, Functions, Style, Theories of Leadership, Types. Communication: Importance of communication, communication Process, Barriers to Communication, Steps for improving Communication, Transactional Analysis

- 1. Organization Behaviour, (PHI) Stephen P Robbins
- 2. Organizational Behaviour, (Sultan Chand)-L M Prasad
- 3. Organizational Behaviour, Himalaya Pub House- R Aswathappa
- 4. Organisational Behavior & Managerial Effectiveness (S.Chand)-Michael, V.P
- 5. Organisational Behaviour (S.Chand)- S. S. Khanka

4th SEMESTER

Paper-15: Banking and Monetary Management

Unit-I

- 1. Theory of Money Supply: Definitions of Money, the conventional approach, the Gurley Shaw Approach, the Central bank approach, Theory of moneys supply, determination cash reserves and liquidity ratios of commercial banks, theories of commercial banking, new horizons in commercial banking.
- 2. Theories of Monetary Transmission Mechanism: The quantity theory, Liquidity preference theory, Portfolio balance theory, Wealth adjustment theory.

Unit-II

3. Liquidity Theory of Money: Redcliff Report, Gurley Shaw thesis, Role of Financial intermediaries, NFI and Monetary policy, Central Bank Control of NFI.

Unit-III

4. Central Banking: Organization and functions, essence of central Banking, Characteristics of developed money market, Central Banking in Developed money markets, Central Banking objective, Treasure and central Bank Relations, Central Banking and Economic Growth.

Unit-IV

 Monetary Management: Objectives of Monetary Management, Evolution of Major aims, their compatibility, Mechanism of Monetary policy, Mechanism of monetary policy, Discount rate policy, Open Market operations, variable, Reserve ratios, Secondary reserve proposal, selective credit controls, effectiveness of monetary policy in developed and under developed money markets.

Unit-V

6. Banking System: The Bank of England and the English Banking System, The London Discount Market, Organization of the Federal Reserve System, Comparison between London and New York Money Markets, Monetary policy of the Reserve Bank of India.

Reference:

- 1. Modern Banking-R. S. Sayers
- 2. Central Banking after Bagehot- R. S. Sayers
- 3. Central Banking-Dekock
- 4. Central Banking and Economic Development-L. V. Chandler
- 5. An Introduction to Monetary Theory and Policy-D. Wrightsman
- 6. Money in a Theory of Finance-Gurley and Shaw
- 7. Techniques of monetary Control-J. Aschheim
- 8. Money, Debt and Economic Activity- A. G. Garch
- 9. Lectures on Monetary Management-R. C. R. Whittlessy, Vora & Co., Bombay
- 10. Capital Fund in Underdeveloped Countries-E. Novin
- 11. Readings in British Monetary Economics-(Ed.)-H. G. Johnson
- 12. Redcliff Committee Report
- 13. A Review of Current Banking Theory and Practice (Revised by Alok Ghosh)-S. K. Basu
- 14. Central Banking in Underdeveloped Money Markets-S. N. Sen

Paper-16: Regional Economics

Unit-I

1. Important of regional analysis in developed and backward economics.

 Definitional problems in region: (a) Physical or geographical (b) Demographic (c) Planning regions (d) Model Regions (analysis for identification of a region, regional approach to the problems of backward economy)

Unit-II

3. Location of Agglomeration: Agglomeration economic Weber and locational agglomeration, transport cost and location, Locational inter-dependence, location and decision criteria.

Unit-III

4. Nodal Hierarchy: Central Place Theory, The Central place hierarchy and the ranksize rule gravity model growth poles.

Unit-IV

5. Federalism and Economic Growth: Theory of federalism, division of sources of revenue between the central and state governments with special reference to Indian adjusting mechanism, problems of resources mobilization at the regional level.

Unit-V

6. Regional aspects of stabilization and growth policy: Post war regional cyclical behavior and policy measures for stabilization, theories to explain regional differences in growth, fiscal programmes, tax and transfer programmes, fiscal responses of power level governments, regional orientation to policy programmes and central responsibility.

Reference:

- 1. Methods of Regional Analysis-W. Isard, MIT Press
- 2. Regional Analysis-L. Needleman
- 3. Location and Space Economics-Walter Isard
- 4. Regional Economic: Location Theory, Urban Structure and Regional Change-H. W. Richardson
- 5. Federalism and Economic growth-Hicks
- 6. Federal Finance in Developing Economy-R. N. Tripathy
- 7. Union, State Financial Relation-D. T. Lakdawala

Paper-17: Dissertation (200 marks)