KOLHAN UNIVERSITY, CHAIBASA

WEST SINGHBHUM, JHARKHAND
DEPARTMENT OF ECONOMICS



UNDER CHOICE BASED CREDIT SEMESTER SYSTEM

SYLLABUS

FOR
B.A. ECONOMICS
w.e.f. Session (2017-2020)

H.O.D
University Deptt.of Eco
K.U.Chaibasa

DEAN Social Science K.U.Chaibasa REGISTRAR Kolhan University Chaibasa

University Deptt. of Economics Kolhan University, Chaibasa.

Board of Studies

Dr. Ramesh Sharan
 Vice – Chancellor, V.B.U. Hazaribagh
 (External Expert)

Member Wu

Dr. G. N. Sahu.
 HOD, Deptt. Of Economics, K.U. Chaibasa.

Chairman Cusolin

3. Dr. V.K. Singh.
Associate Prof. JSR. Co-operative College, JSR

Member Whing

Dr. R.K. Singh.
 HOD, Economics, Tata College, Chaibasa.

Member

Russips

Dr. Suhita ChatterjeeAsstt.Prof, Deptt. Of Eco, GSCW, JSR

Member

MILA

Dr. D.K. Mishra
 Associate Prof and HOD Eco.
 K.S. College, Seraikela.

Special Invitee

Syllabus for B A. Economics (Core & Elective)

Core Subject forHonours

B. A. Economics Honours course will be of Three Academic years comprising of 6 Semesters. (Two Semesters every year). There will be 14 compulsory core papers in Economics Honours. There will be Two DSE in Semester Vth and one in Semester VIth. Project work is compulsory in Semester VIth.

Elective (GE)

Elective (GE) means a subject that the students opt for along with his/her core subject, i.e. Who opts core course other than Economics, may opt Economics. One paper will be taught in each semester i.e from- I to IV. There will be no Elective (GE) in semester V and VI

B.A. Programme (General)

In B.A. Programme (General) Students who opt Economics have to study one paper Economics in each Semester from Semester I to 4th as core paper. In Semester Vth&VIth Students may also opt DSE (Economics) one paper in each Semester, one Elective (GE) in semester Vth&VIth.

B.A Economics (Honours)

SEMESTER - I

PAPER NO	PAPER CODE	TITLE	L+T= CREDIT	TOTAL MARKS
I	ECC101	Micro Economics - I	5 + 1 = 6	30+70 = 100
II	ECC102	Indian Economics - I	5 + 1 = 6	30+70 = 100

SEMESTER - II

PAPER	PAPER CODE	TITLE	L + T =	TOTAL MARKS
NO			CREDIT	
III	ECC201	Micro Economics – II	5 + 1 = 6	30+70 = 100
IV	ECC202	Indian Economics - II	5 + 1 = 6	30+70 = 100

SEMESTER - III

PAPER	PAPER CODE	TITLE	L + T =	TOTAL MARKS
NO			CREDIT	
V	ECC301	Macro Economics	5 + 1 = 6	30+70 = 100
VI	ECC302	International Economics	5 + 1 = 6	30+70 = 100
VII	ECC303	Public Finance	5 + 1 = 6	30+70 = 100

SEMESTER - IV

PAPER	PAPER CODE	TITLE	L + T =	TOTAL MARKS
NO			CREDIT	
VIII	ECC401	Money & Banking	5 + 1 = 6	30+70 = 100
IX	ECC402	Mathematical Analysis	5 + 1 = 6	30+70 = 100
Χ	ECC403	Economics of Growth and	5 + 1 = 6	30+70 = 100
		Development		

SEMESTER - V

PAPE	PAPER CODE	TITLE	L + T =	TOTAL MARKS
R NO			CREDIT	
XI	ECC501	Statistical Analysis	5 + 1 = 6	30+70 = 100
XII	ECC502	History of Economic Thought - I	5 + 1 = 6	30+70 = 100
	ECC DSE1 501A/B	Mathematical (A) / Agriculture – I(B)	5 + 1 = 6	30+70 = 100
	ECC DSE2 502A/B	Mathematical (A) / Agriculture – II (B)	5 + 1 = 6	30+70 = 100

Choose any one Group - A or B

SEMESTER - VI

PAPE	PAPER CODE	TITLE	L + T =	TOTAL MARKS
R NO			CREDIT	
XIII	ECC601	History of Economic Thought - II	5 + 1 = 6	30+70 = 100
XIV	ECC602	Economics of Education and Health	5 + 1 = 6	30+70 = 100
	ECC DSE3 601C/D	Econometrics (C) / Demography (D)	5 + 1 = 6	30+70 = 100
		Project Work	5 + 1 = 6	30+70 = 100

Choose any one paper C or D

Elective (GE)

SEMESTER	PAPER NO	PAPER CODE	TITLE	L + T = CREDIT	TOTAL MARKS
SEMESTER I(B.A	(Elective	ECK101/ELGE I	Economic Theory	5 + 1 = 6	30+70 = 100
Part-I)	GE-I)				
SEMESTER II(B.A		ECK202/ELGE2	Macro Economics	5 + 1 = 6	30+70 = 100
Part-I)	ElectiveGE-				
	2				
SEMESTER III(B.A	ElectiveGE-	ECK301/ELGE	Public Finance &	5 + 1 = 6	30+70 = 100
Part-II)	3		International		
			Trade		
SEMESTER IV		ECK404/ELGE-4	Indian Economy	5 + 1 = 6	30+70 = 100
(B.A Part-II)	ElectiveGE-				
	4				

Syllabus of U.G, B.A. Programme (General)

SEMESTER – I

	1	1	T	1	1
SEMESTER	PAPER	PAPER CODE	TITLE	L + T =	LECTURE
	NO			CREDIT	
SEMESTER I	1	ECDSE101/G	Micro Economics	5 + 1 = 6	30+70 = 100
(B.A Part-I)					
SEMESTER II	II	ECDSC201/G	Macro Economics	5 + 1 = 6	30+70 = 100
(B.A Part-I)					
SEMESTER III	III	ECDSC301/G	Public Finance &	5 + 1 = 6	30+70 = 100
(B.A Part-II)			International Trade		
SEMESTER IV	IV	ECDSC401/G	Indian Economy	5 + 1 = 6	30+70 = 100
(B.A Part-II)					
SEMESTERV	V	ECDSE501/G	Demography (or) Industrial	5 + 1 = 6	30+70 = 100
(B.A Part-III			Economics		
SEMESTER VI	VI	ECDSE601/G	Economics of Education and	5 + 1 = 6	30+70 = 100
(B.A Part-III)			Health (or) Agriculture		
,			Economics		
SEMESTERV	Elective	EC/GE-501	Basics Statistics	5 + 1 = 6	30+70 = 100
(B.A Part-III)	(GE-I)				
SEMESTER VI	Elective	EC/GE-601	Economics of Social Sector	5 + 1 = 6	30+70 = 100
(B.A Part-III)	(GE-II)		and Environment.		

Core Subject forB.A Economics (Honours)

SEMESTER	1
PAPER NO	1
PAPER CODE	ECC101
TITLE	Micro Economics - I

Unit 1: Introduction

Nature and Scope of Economics, Methodology in Economics, Choice and Scarcity, Basic Postulates, Role of Price Mechanism, Demand and Supply, Basic Framework – Applications, Market Equilibrium, Elasticity of Demand and Supply.

Unit 2: Consumer's Equilibrium

Utility Analysis (The Marshallian Approach), The HicksianIndifference Curves Analysis, The Substitution effects (Hicks and Slutsky), Consumer's Surplus (Marshall and Hicks Approach).

Unit 3: Theory of Productions and Costs

Production function, Iso-quants, Law of Variable Proportion, Returns to scale, Different Concepts of costs and cost curves, Equilibrium of the firms, Expansion path.

Unit 4: Market Structure

Different Types of Markets.

- Ahuja, H.L. Advanced Economic Thoery.
- Bilas, R.A (1971), Micro Economics Theory, McGraw Hill Kogakausha, Ltd.
- Koutsoyiannis, A. (1979), Modern Micro Economics, McMillan Press Ltd, London.
- Salvatore, Dominick (2003), Micro Economics, Oxford University Press, New Delhi.
- Stonier, (Alfred. W.) And (Douglas C), Hague (2008), A Textbook of Economic Theory, Pearson Education.
- Hale R. Varian: Microeconomic Analysis, W.W. Norton & Company . New York ,Landan.
- Samuelson and Nordhaus: Economics, Irwin McGraw Hill (17th Edition is Available).

SEMESTER	1
PAPER NO	II
PAPER CODE	ECC102
TITLE	Indian Economics – I

Unit 1: Structure of Indian Economy

Basic features, Natural resources – Land, Water and Forest resources, Broad Demographic Features of Indian Population, Problem of over-population policies, Infrastructure Development and Growth of Population.

Unit 2: Planning in India

Meaning of Planning, Objectives, Strategy, target and achievement of the Five Year Plans, New Economic Reforms – Liberalization, Privatization and Globalization, Financial Sector Reforms.

Unit 3: Agriculture

Nature and importance, Trends in agricultural production and productivity, Factors determining productivity, land reforms, New Agricultural Strategy and Green Revolution, Rural credit, Agricultural Marketing.

Unit 4: Basic Features of The Economy of Jharkhand

Demography, Agriculture, Industries, State Economic Policy.

- Dutt, Rudra and Sundaram (2011), Indian Economy, S. Chand.
- Dhawan, S.K. (2006), Handbook of India Economy, Vol 2, Maxford Books, New Delhi.
- Jalan, Bimal (Ed.) (1993), The Indian Economy, Problems and Prospects, Pengium Books.
- Kapila, Uma (2007), Indian Economy, Performance and Policies, Adcademic Foundation, New Delhi.
- Kapila Uma (Ed.) (2007), India's Economic Development Since 1949, Academic Foundation, New Delhi.
- Mishra S.K. and V.K. Puri (2004), Indian Economy, Himalaya Publishing.

SEMESTER	II
PAPER NO	III
PAPER CODE	ECC201
TITLE	Micro Economics - II

Unit 1: Market Equilibrium

Perfect and Imperfect Market, Equilibrium of firm – Perfect Competition, Monopoly and Price Discrimination, Measure of Monopoly Power, Monopolistic Competition, Duopoly, Oligopoly.

Unit 2: Factor Pricing

Marginal Productivity Theory of Distribution, Adding up problem, Rent – concepts, Ricardian and Modern theory of rent, Interest – Classical and Keynesian theories, Profits – Innovation, Risk and Uncertainty Theories.

Unit 3: Welfare Economics

Definition of Welfare Economics, Problems in measuring Welfare, Classical welfare Economics, Pareto – Optimality Criteria, Compensation Principle – Kaldor, Hicks.

- Ahuja, H.L. Advanced Economic Thoery.
- Bilas, William J. (1971), Micro Economics Theory, McGraw Hill Kogakausha, Ltd.
- Koutsoyiannis, A. (1979), Modern Micro Economics, McMillan Press Ltd, London.
- Salvatore, Dominick (2003), Micro Economics, Oxford University Press, New Delhi.
- Stonier, (Alfred. W.) And (Douglas), Hague (2008), A Textbook of Economic Theory, Pearson Education.
- Hale R. Varian: Microeconomic Analysis, W.W. Norton & Company Education
- Samuelson and Nordhaus: Economics, Irwin McGraw Hill (17th Edition is Available).

SEMESTER	II
PAPER NO	IV
PAPER CODE	ECC202
TITLE	Indian Economics – II

Unit 1:Industry

Industrial Development during the Plan periods, Industrial Policy of 1948, 1956,1977,1980 and 1991, Industrial Licensing Policy: Growth and Problems of Small - Scale industries, Role of Public Sector Enterprises in India's Industrialization.

Unit 2: External Sectors

Role of Foreign Trade, Modern Trends in Exports and Imports, Composition and direction of India's Foreign Trade, Balance of Payments Crisis and the New Economic Reforms – Export Promotion measures and the New Trade Policies, Foreign Capital – FDI, AID, Multinational Corporation (MNCs).

Unit 3:Physical and Human Infrastructure

Energy, Social Infrastructure – Education and Health, Environment, Regional Imbalances, Issues and Policies in financing infrastructure Development, Human Resource Development Poverty and Environment .

Unit 4:Important Areas of Concern

Poverty and inequality, Unemployment, Rising Prices, Problems of Industrialization.

- Dutt, Rudra and Sundaram (2011), Indian Economy, S. Chand.
- Dhawan, S.K. (2006), Handbook of India Economy, Vol 2, Masford Books, New Delhi.
- Jalan, Bimal (Ed.) (1993), The Indian Economy, Problems and Prospects, Pengium Books.
- Kapila, Uma (2007), Indian Economy, Performance and Policies, Adcademic Foundation, New Delhi.
- Kapila Uma (Ed.) (2007), India's Economic Development Since 1949, Academic Foundation, New Delhi.
- Mishra S.K. and V.K. Puri (2004), Indian Economy, Himalaya Publishing.

SEMESTER	III
PAPER NO	V
PAPER CODE	ECC301
TITLE	Macro Economics

Unit 1: National Income and Social Accounts

Concept and Measurement of National Income in different Methods.

Unit 2: Output and Employment

Say's Law of Markets and The Classical Theory or Employment, Keynes's objection to the Classical Theory, aggregate demand aggregate supply function, the principle of effective demand, consumption function – Average and Marginal Propensity to consume, factors influencing consumption function, the Investment – autonomous and induced investment, marginal efficiency of capital.

Unit 3: Rate of Interest

Classical, Neo – Classical and Keynesian and Post Keynesian Theories of Interest.

Unit 4: Trade Cycles

Nature and Characteristics, Hawtrey's Monetary Theory, Hayek's Over Investment, Theory, Keynesian Theory of Trade Cycles, Hicksian Theory of Trade Cycle, Control of trade cycles.

Basic Reading List

- Ackley, G. (1978), Macroeconomics: Theory and Policy, Macmillan, New York.
- Gupta, Suraj B. (2003), Monetary Planning for India, Oxford University Press, New Delhi.
- Harris, Monetary Theory, McGraw Hill Publications.
- Mankiw, N. G. (2007), Principles of Macro Economics, Thomson Learning.
- Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publication, New Delhi.

Vaish, M.C. Macroeconomic Theory, Vikas Publishing House.

SEMESTER	III
PAPER NO	VI
PAPER CODE	ECC302
TITLE	International Economics

Unit 1: Importance of Trade and Trade Theories

Importance of the study of International Economics, Inter-regional and international trade, Theories of Absolute Advantage, Comparative Advantage and Opportunity cost, Heckshcher- Ohlin Theory of International trade – its main features, assumptions and limitations.

Unit 2: Gains from Trade

Gains from Trade – their measurement and distribution, Trade as an engine of economic growth, Concepts of terms of trade and their importance in the theory of trade, Doctrine of reciprocal demand – its importance and limitations in the theory of trade.

Unit 3: Tariffs and Quotas

Types of tariffs and quotas, their impact in partial equilibrium analysis, Free trade and policy of tariffs in relation to economic growth with reference to India, Concept of optimum tariffs.

Unit 4: Balance of Trade and Balance of Payments

Concepts and components of Balance of Trade and Balance of Payments, Equilibrium and Disequilibrium in Balance of Payments, Consequences of disequilibrium in Balance of Payments, Various measures to correct deficit in the Balance of Payments, Relative merits, demerits and limitations of devaluation, Concept and implication of Foreign Trade Multiplier, Functions of IMF, World Bank and GATT / WTO, Reform of the International Monetary system and India.

- Mithani, D.M, International Economics, Himalaya Publishing House.
- Salvatore, D. (1997), International Economics, Prentice Hall, Upper Saddle River, N.J., New York.
- Soderston, BO (1991), International Economics, Macmillan Press.

SEMESTER	III
PAPER NO	VII
PAPER CODE	ECC303
TITLE	Public Finance

Unit 1: Nature and Scope of Public Finance

Meaning and scope of Public Finance, Distinction between Private and Public Finance, Public goods Vs Private goods, The Principle of Maximum Social Advantage, Market failure, Role of the government.

Unit 2: Public Expenditure

Meaning, Classification and Principle of Public Expenditure, Canons and effects of Public Expenditure, Trends in Public Expenditure and Causes of Growth of Public Expenditure in India.

Unit 3: Taxation

Sources of Public Revenue, Taxation – Meaning, Canons and Classification of Taxes, Division of Tax Burden – the Benefit and Ability - to - Pay Approaches, Impact and Incidence of taxes, Taxable capacity, Effects of taxation, Characteristics of a Good tax system, Major trends in tax revenue of the Central and State Governments in India.

Unit 4: Public Debt and Financial Administration

Sources of Public Borrowing, Effects of Public Debt, Methods of Debt redemption, the Public Budget – Kinds of Budget, Economic and Functional Classification of the Budget.

- Kindleberger, C.P. (1973), International Economics, R.D. Irwin, Komewood.
- Mithani, D.M, International Economics, Himalaya Publishing House.
- Musghrave, R.A. and P.B. Musgrve(1976), Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo.
- Radhakrishnan, N. Public Finance, Vrinda Publication.
- Sundaram, K.P.M and K.K. Andley Finance, s.Chand and company.
- Mehta J.K, Public finance.
- Tyagi, B.P. Public Finance.

SEMESTER	IV
PAPER NO	VIII
PAPER CODE	ECC401
TITLE	Money & Banking

Unit 1: Basic Concepts

Money – meaning, functions and classification, Role of money in Capitalist , Socialist and Mixed Economies.

Unit 2: Value of Money and Inflation

Uses and Limitations of Index Numbers, Quantity theory of money, Cash Transactions and Cash Balance Approaches, the Keynesian Approach, Inflation, Deflation. Inflation- Definition types, causes and effects of Inflation on different sectors of the economy, Demand pull and cost push Inflation, Measures to control Inflation.

Unit 3: Commercial Banking

Meaning and types, functions of commercial banks, process of credit creation – purpose and limitations, liabilities and assets of banks, evolution of commercial banking in India after independence, a critical appraisal of the progress of commercial banking after nationalization, recent reforms in banking sector in India.

Unit 4: Central Banking

Functions of Central Bank, Quantitative and Qualitative Method of Credit Control – Bank Rate , Open Market Operation, Variable reserve ratio and selective method, Role and function of the Reserve Bank of India, Objectives and limitation of Monetary Policy with special reference to India.

- Financial Institutions Markets (1999), L.M. Bhole, Tata McGraw Hill.
- Mudra, Banking and AntarrashtriyaVyapar.
- M.C. Vaish, Monetary Theory.
- T. T. Sethi, MaudrikArthshastra and AntarrashtriyaVyapar.
- M. L. Sethi, Monetary Theory.
- M. L. Jhingan, SamshthiArthshastra.

SEMESTER	IV
PAPER NO	IX
PAPER CODE	ECC402
TITLE	Mathematical Analysis

Unit 1: Basic Concept

Constant Numbers, Variables and Parameters, Functions, System of Elementary Analytical Geometry – Straight Lines, Parabola, circle, economic problems in Analytical geometry.

Unit 2: Limits, Continuity and Derivatives of a Function

Concept of Limit, Continuity and Derivatives of a Function, (Single Variable Model), Maxima and minima, Points of Inflexion.

Unit 3: Matrix and Determinants

Various types of matrix, Important rules of matrix Algebra, Pre- Multiplication and Post
—Multiplication, Transpose of matrix, Determinant, Adjoint and Inverse of matrix.

Unit 4: Functions and Diagrams in Economics and Economic Application of Derivatives.

Concept of MR, MC, Relationship between Total, Average and Marginal, (Rev. & Costs). Equilibrium of Firm under Perfect Competition, Monopoly, Duopoly.

Unit 5: Exponential and Logarithmic function and Logarithmic Derivation

Exponential and Logarithmic functions, Compound interest, Present Values and capital values, Derivatives of Exponential and Logarithmic Functions, Problems of Capital and Interest, Elasticity of a function, Elasticity of Demand, Cost elasticity in normal costs conditions.

Unit 6: Integration

Definite integrals, Indefinite integrals as inverse of Differentiation, Technique of Integration, Relation between Average and Marginal concepts, Capital Values, Problems of durable Capital Values.

- Baumol W.J. Economic Theory & Operational Analysis Yamane, Mathematics for Economics.
- Yamane, Taro, (1975), Mathematics for Economics, Prentice Hall of India, New Delhi.
- Allen, R.G.D (1974), Mathematical Analysis for Economist, Macmillan Press and ELBS, London.
- Chiang. A.C. (1986), Fundamental Methods of Mathematical Economics,
- Madnani, G.M.K and Mehta, B.C., Mathematical Economics, Sultan and Sons Publication, New Delhi.

SEMESTER	IV
PAPER NO	X
PAPER CODE	ECC403
TITLE	Economics of Growth & Development

Unit 1: Development and Economic Growth

Economic Growth and Development, Factors affecting Economic Growth, Growth Models – Harrod and Domar, Solow and Meade, Mrs. John Robinson, Theories of Development – Adam Smith, Karl Marx, Ricardo.

Unit 2: Economic Development, Population and Institution

Development and Underdevelopment, Measuring development and development gap — Per capita income, Inequality of Income and Wealth, PQLI Human Development Index and other Indices of Development — Human Resource Development — (Education, Health, Nutrition & Food search) — Population Problems and growth pattern of population, Theory of Demographic Transition.

Unit 3: International Aspects of Economic Development

International trade as an Engine of Growth , Static and Dynamic gains from trade, Prebisch Singer and Myrdal thesis VS. Free trade, Export – led growth, Dual gap analysis, Balance of Payments, Tariffs and effective protection, Post GATT International economic order, WTO and Developing countries.

Basic Reading List:

Economic Thought, Vikas Publishing House.

- Blaug, M. (1997), Economic Theory in Retrospect: A History of Economics Thought from Adam Smith to J.M, Keynes (5th Ed.) Cambridge.
- Gide, C and G. Rist(1956), A History of Economic Doctrine (2nd Ed.), George Harrod and Co. London.
- Gide, A. And A.E. Thomson (1980), The Development of Economic Doctrine (2nd Ed.), Longman Group, London.
- Hejala, T.N. (1997), History of Economic Thought, Konark Publishers Pvt Ltd.
- Roll, E. (1973), A History of Economic Thought, Faber, London.
- Mishra S.K. and V.K. Puri (2006), Economics of Development and Planning, Theory and Practices, Himalaya Publishing House.
- Todaro, M.P. and Stephen C. Smith (2009), Economic Development, Pearson Education.

SEMESTER	V
PAPER NO	XI
PAPER CODE	ECC501
TITLE	Statistical Analysis

Unit 1: Introduction to Statistics

Definition and Scope, Data Collection, Primary and Secondary data, Census and sampling methods, Graphic, Diagrammatic and Tabular presentation of data.

Unit 2: Central Tendency and Dispersion

Measures of Central tendency, Mean, Median, Mode, Geometric Mean and Harmonic Mean, Measures of Dispersion, Range, Mean Deviation, Standard Deviation, Coefficient of variation, Moments, Skewness and Kurtosis.

Unit 3: Correlation and Regression

Correlation – simple, coefficient of correlation – Karl Pearson and rank Correlation, Regression Analysis, Least squares Method, Interpretation of Regression Coefficient, Time Series, Concept and Estimation of Trend line.

Unit 4: Index Numbers

Index numbers – concept, price relative, Quantity, Value relative, Laspeyer's, Paasche's formula and Fisher's Test for Ideal Index Number, Problems in the construction and limitation of index number, Construction of Cost of Living Index.

Unit 5: Probability and Distribution

Probability – Concept and Rules of probability (Addition and Multiplication) random variables, mathematical expectation, Theoretical distribution- Binomial, normal and Poisson distribution, their properties.

- Allen, R.G.D (1974), Mathematical Analysis for Economist, Macmillan Press and ELBS, London.
- Chiang. A.C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
- Mongia. D.S. (2006), Mathematics and Statistics for Economics, Vikash Publishing House.
- Speigel, M.R. (1992), Theory and Problems of Statistics, McGraw Hill Book, London.
- Yamane, Taro, (1975), Mathematics for Economics, Prentice Hall of India, New Delhi.
- Goon, A.M., Gupta, M.K., Das Gupta B. (2013): Fundamentals of Statistics, Vol I, World Press Ltd, Calcutta.

SEMESTER	V
PAPER NO	XII
PAPER CODE	ECC502
TITLE	History of Economic Thought - I

Unit 1: Early Period

Mercantilism – Main Characteristics, Thomas Munn – Physiocracy, Natural order, Primacy of Agriculture, Social classes, Tableau Economique, Taxation, Turgot – Economic ideas of Petty, Locke and Hume.

Unit 2: Classical Period

Adam Smith – Division of labour, Theory of value, Capital accumulation, Distribution, Views on Trade Economic Progress; David Ricardo – Value, Theory of Rent, Distribution, Ideas on Economic Development and International Trade; Thomas R. Malthus – Theory of Population, Sismondi, Karl Marx – Dynamic ideas of J.B. Say, J. S. Mill, Historical School – Senior, List.

- Bhatia H.L. History of Economic Thought, Vikas Publishing House.
- Blaug, M. (1997), Economic Theory in Retrospect: A History of Economics Thought from Adam Smith to J.M, Keynes (5th Ed.) Cambridge.
- Gide, C and G. Rist(1956), A History of Economic Doctrine (2nd Ed.), George Harrod and Co. London.
- Gide, A. and A.E. Thomson (1980), The Development of Economic Doctrine (2nd Ed.), Longman Group, London.
- Hejala, T.N. (1997), History of Economic Thought, Konark Publishers Pvt Ltd.
- Roll, E. (1973), A History of Economic Thought, Faber, London.

SEMESTER	VI
PAPER NO	XIII
PAPER CODE	ECC601
TITLE	History of Economic Thought - II

Unit 1: Marginalists

The precursors of marginalism – Cournot, Thunen, Gossen; The Marginalist revolution, Jevons, Wlaras and Manger; Bohm-Bawark, Wicksell and Fisher; the rate fo interest Wickstead and Weiser; Distribution-Marshall as a great synthesizer, role of time in price determination, economics methods, ideas on consumer's surplus, elasticities, prime and supplementary costs, representative firm, external and internal economics, quasi-rent, organisation as a factors of production, nature of profits; Pigou; Walfare Economics; Schumpeter; Role of entrepreneur and innovations.

Unit 2: Indian Economic Thought

Modern Economic ideas; Naoraoji, Ranade; Economic ideas of Gandhi; Village, Swadeshi, place of machine and labour, cottage industries trusteeship.

- Bhatia H.L. History of Economic Thought, Vikas Publishing House.
- Blaug, M. (1997), Economic Theory in Retrospect: A History of Economics Thought from Adam Smith to J.M, Keynes (5th Ed.) Cambridge.
- Gide, C and G. Rist(1956), A History of Economic Doctrine (2nd Ed.), George Harrod and Co. London.
- Gide, A. and A.E. Thomson (1980), The Development of Economic Doctrine (2nd Ed.), Longman Group, London.
- Hejala, T.N. (1997), History of Economic Thought, Konark Publishers Pvt Ltd.
- Roll, E. (1973), A History of Economic Thought, Faber, London.

SEMESTER	VI
PAPER NO	XIV
PAPER CODE	ECC602
TITLE	Economics of Education and Health

Unit1: Concept of Economics of Education-Educational production function; Education, productivity and income; Educational indicators; Education and Economic development; Human development-concept and measurement; Educational costs and benefits-Educational cost function, cost benefit model; Educational planning and manpower; NGOs and Human Resource Development.

Unit 2: Economics of Health-Concept, dimensions and indicators; Determinants of health status; Disease burden and its measurement; Hospital as a firm; Economic appraisal in health care — Cost benefit and cost effectiveness approaches; Health planning and management; Primary health care and health for all; Community health care; Environment and health; International health organization — WHO and other United Nations agencies.

Unit 2: India's Educational system – Problems and suggestions; Human capital in India; National policy on education and health; Health programme and infrastructure; Financing of education and health programmes in India; Expenditure on health and education during post reform period; Health care system in India; Health, poverty and economic growth in India.

Basic Readings

- Mark Blaug: Economics of Education: Selected Readings, vol. I and II Edward Elger.
- Schultz, T.W.: Investment in Human Capital.
- Ritzen, J.M.M.: Education, Economic Growth and Income Distribution.
- Folland, Goodman and Stano; The Economics of Health and Health Care.
- Thomas E. Getzen: Health Economics.
- Mahbubul Hag: Quality of life.
- Martha Nussbaum and Amartya Sen: Quality of life.
- Human Development Report 2007.
- National Human Development Report 2001.
- Report on National Commission on Macroeconomics and Health (2015 Onward)
- Economics Survey (2015 Onward)

SEMESTER	V
PAPER NO	DSE1
PAPER CODE	ECCDSE1501A (Group - A)
TITLE	Mathematical Economics-I

Unit 1: Quantitative Methods

Variables, Constants and Parameters, Simple Functional relationship and their Graphs, Elementary ideas of differential and integral Calculus, Matrix and Determinants, Solution of simultaneous equation, Quadratic equation, Difference and Differential equation.

Unit 2: Consumer Theory

Utility function, Budget line, Constrained optimization, Consumer equilibrium, Income effect, Substitution effect, Slutsky equation, Derivation of demand curve, Elasticity of demand, Consumers Surplus.

Unit 3: Theory of Production

Properties of Production function – homogenous and non-homogenous, Cobb-Douglas, CES, Returns to scale, Technology progress and production function, Choice of optimal Combination of factors of production, cost and revenue functions, Derivation of cost Curves, Relation between total, average and marginal cost and revenue, Producer's Surplus, Production Possibility Curve, Adding- up theorem.

- Baumol W.J. Economic Theory & Operational Analysis Yamane, Mathematics for Economics.
- Chiang, A.C. Fundamental Methods of Mathematical Economics.
- Allen, R.G.D (1974), Mathematical Analysis for Economist, Macmillan Press and ELBS, London.
- Chiang. A.C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
- Mongia. D.S. (2006), Mathematics and Statistics for Economics, Vikash Publishing House.
- Speigel, M.R. (1992), Theory and Problems of Statistics, McGraw Hill Book, London.
- Yamane, Taro, (1975), Mathematics for Economics, Prentice Hall of India, New Delhi.
- Madnani, G.M.K and Mehta, B.C., Mathematical for Economics, Sultan and Sons Publication, New Delhi.

SEMESTER	V
PAPER NO	DSE1
PAPER CODE	ECCDSE1501B (Group-B)
TITLE	Agriculture Economics-I

Unit 1: Rural Economy of India

Structure of the India economy – Place of Agriculture in Rural Economy, Composition of the India rural economy, Farm Sector and non - farm sector, diversification of agriculture and allied activities (Fisheries, Horticulture, Floriculture), Forestry in India— Its growth, Problems and State policies, Cattle wealth of India dairying, Rural industrialization – Food Processing and Agro based industries, Development of rural infrastructure.

Unit 2: Development of Agriculture

Role and importance of agriculture in economic development, linkages between the agriculture sector and the non- agricultural sector, changing nature of linkages; Agricultural resources in India— Land utilization and Cropping pattern, Irrigation in India; command area development and flood control; Trends in agricultural growth and agricultural productivity, Pattern of agricultural development, regional variation.

Unit 3: Agrarian Relation and Land Reforms in India

Agrarian relation — Historical evolution and land reforms program during 1950's and reforms; Programs and performance during the 1970's and after.

- Bhaduri, A. (1984), The Economic Structure of Back ward Agriculture, Macmillan, Delhi.
- Bilgrami, S. A. R. (1996) Agricultural Economics, Himalaya Publishing House, Delhi.
- Dantwala, M.L. et. Al (1991) Indian Agricultural Development Since Independence, Oxford and IBH, New Delhi.
- Government of India (1976), Report of the National Commission on Agriculture, New Delhi.

SEMESTER	V
PAPER NO	DSE2
PAPER CODE	ECCDSE2502A (Group A)
TITLE	Mathematical Economics -II

Unit 1: Market Structure/ Pricing

Concept of equilibrium, Equilibrium of the firm under Perfect competition, Monopoly, Price discrimination, Monopolistic competition, Subsidies and taxes, Economies of Scale, Market equilibrium.

Unit 2: Input – Output Analysis, Linear Programming

Input – output analysis, the simple closed and open model, Linkages and concepts and measurement, Dynamic Input – output model, Linear Programming – Basic concepts of primal and dual, Theorems of Linear Programming, Graphical method .

Unit 3: Game Theory

Introduction and Concepts – simple and strategy, Saddle point solution, Prisinors dilemma, Pay – off matrix of a game – Two Person zero -sum- game.

- Allen, R.G.D (1976), Mathematical, Macmillan, London.
- Arrow, K.J. and M. Intrilligator, (Eds) (1992), Hand Book of Mathematical Economics, Vol. 1, 2 and 3, North Holland, Amsterdam.
- Henderson, J.M and R.E. Quandt (1980), Micro Economic Theory A Mathematical Approach, McGraw Hill, New Delhi.
- Allen, R.G.D., Mathematical Analysis for Economics.
- Chiang, A.C. Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
- Chung J.W. (1993), Utility and Production; Theory and Applications. Basil Blackwell, London.

SEMESTER	VI
PAPER NO	DSE2
PAPER CODE	ECCDSE2502B (Group B)
TITLE	Agriculture Economics – II

Unit 1: Technological Change in Agriculture

Technology in agriculture; traditional techniques and practices; HYV seed-Fertilizer, Water technology (Green Revolution); Sustainable Agriculture; emerging trends in Agriculture Technology; dry land farming; use of Bio-technology techniques.

Unit 2: State and Agriculture - I

Agricultural finance in India: Importance; types of requirements; sources, non-institutional and institutional; existing rural credit delivery system (multi agency approach); Agricultural marketing in India; Market and Marketing functions, channels of distribution of various commodities, Regulated Market and Warehousing; Role of cooperatives in agriculture..

Unit 3: State and Agriculture - II

Agriculture Planning in India: Decentralized planning and indicative planning; incentives in agriculture: Price and non-price incentives; input subsides; Agriculture price policies (APP), Nature of demand and supply of agriculture products, need for state intervention; objectives of APP instruments and evaluation; Food security in India and public distribution system.

Unit 4: Sixty Years of Indian Agriculture

An overview of Agriculture development; under employment and unemployment in rural economy; Globalization of Indian economy and its effects on Indian Agriculture.

- Bhaduri, A. (1984), The Economic Structure of Back ward Agriculture, Macmillan, Delhi.
- Bilgrami, S. A. R. (1996) Agricultural Economics, Himalaya Publishing House, Delhi.
- Dantwala, M.L. et. Al (1991) Indian Agricultural Development since Independence, Oxford and IBH, New Delhi.
- Government of India (1976), Report of the National Commission on Agriculture, New Delhi.

SEMESTER	VI
PAPER NO	DSE3 (C)
PAPER CODE	ECCDSE3601C
TITLE	Econometrics

Unit 1: Introduction

Definition and scope of Econometrics, The Methodology of Econometrics Research, Specification and estimation of an Econometrics Model, Basic Concepts of estimation, Desirable properties of estimators, Unbiasedness efficiency, Consistency and Sufficiency.

Unit 2: Simple Regression Analysis and Theoretical Distribution

Statistical VS. Deterministic relationships, Correlation and Regression, coefficient of determination, Estimation of an equation, Theoretical frequency distribution and application of Binomial, Poisson and Normal, Testing of hypothesis, type I and Type II errors, Standard errors, Tests bases on Z, t, X² (Chi square) Statistics.

Unit 3: Estimation Theory

Ordinary least square (OLS) methods – assumptions, Gauss - Markow theorem, Testing of Regression co-efficient, test for regression as a whole, coefficient of determination, F test.

Unit 4: Problems in OLS Estimation

Problems of heteroscedacity, Auto-correlation (first order), Multicolinearity-their consequences, test and remedies.

Unit 5: Application of Econometric Methods

Production and cost functions and consumption function.

- Amemiya, T. (1985) Advanced Econometrics, Harvard University Press, Cambridge, Mass.
- Gujarati, D.N. (1995), Basic Econometrics (2nd Edition), McGraw Hill, New Delhi.
- Donghery, C. (1998), Introduction to Econometrics, Oxford University Press, New York.
- Goldberger, A.S. (1998), Introductory to Econometrics, Harvard University Press, Cambridge, Mass.
- Koutsoyiannis A. (1977), Theory of Econometrics, (2nd Edition) The Macmillan Press Ltd.

SEMESTER	VI
PAPER NO	DSE3 (D)
PAPER CODE	ECCDSE3601D
TITLE	Demography

Unit 1: Introduction

Demography – Meaning, importance, relation with other disciplines.

Unit 2: Population Study

Population study, Theories of Population – Malthus, Optimum theory of Population and theory of Demographic Transition, Historical evidence of Population growth in developed and developing countries.

Unit 3: Sources of Demography Data in India

Sources of Demography data in India, Census- civil registration system and demographic surveys, National Family Health Survey – I and II – their relative merits and demerits.

Unit 4: Structure of Population

Population trends in the Twentieth Century, Population explosion - Threatened or real, distant or imminent, International aspects of population growth and distribution, Pattern of age and sex structure in more developed and less developed countries, determinants of age and sex structure, Demographic effects of sex and age structure, economic and social implications, Age Pyramids and projection, Individual ageing and population ageing.

Unit 5: Population Projection

Techniques of Population Projection – concept of stationary, stable and quasi -stationary Population; ageing of population in India , changes in family structure and old age security.

Unit 6: Population Policy

Salient features of Population census of 2001, and 2011; evolution of population policy in India, Shift in Policy -focus from population control to family welfare and to women empowerment; demographic status and household behaviour — education, women's autonomy and fertility population, Health, Poverty and Environment linkage in India, the New Population Policy.

Unit 7: Migration and Urbanization

Concepts and Causes.

- Agarwala, S.N. (1972), India's Population Problem, Tata McGraw Hill Co. Bombay.
- Boss, A. (1996), India's Basic Demographic, Statistics, B.R. Publishing Corporation, New Delhi.
- Bogue, DJ. (1971), Principles of Demography, John Wiley New York.
- Chenry, H. and T.N. Srinivasm (Eds) (1989), Handbook of Development Economic, Vol. 1& 2, Elsevier, Amsterdam.
- Choubey , P.K. (2000), Population Policy in India, Kanishka Publication, New Delhi.
- Coale, A.J. & E.M. Hoover 91958), Population Growth & Economic Development in Low Income Countries: A case study of India's Prospects, Princeton University Press, Princeton.

SEMESTER	VI
PAPER NO	DSE4
PAPER CODE	ECCDSE4602
TITLE	Project Work (Compulsory)

ELECTIVE (GE)

SEMESTER	I (B.A Part-I)
PAPER NO	(Elective GE-I)
PAPER CODE	ECK101/ELGE-1
TITLE	Economic Theory

- 1. Micro and Macro Economics.
- 2. Utility Analysis and Indifference curve Analysis, Elasticity of Demand, Consumer's Surplus.
- 3. Laws of Returns, Theory of Production.
- 4. Concept of costs and Revenue, Analysis of Cost Curves and Revenue Curves.
- 5. Value determination under Perfect Competition and Monopoly.
- 6. Marginal Productivity theory of Distribution, Rent Ricardian and Modern theory of Rent, Wages –Demand and supply, Theory of wages, Interest Classical and Liquidity Preference theory of Interest, Profit Knight's and Schumpeter's Theory of Profit.

Basic Reading List:

- Jain, K.P. 'ArthshastraKasiddhanat'.
- Jhingan, M. L. 'VyasthiArthshastra.
- Stonier and Hague, A Text Book of Economic Theory.
- M. L. Seth ArthshastraKeSinddhant.

SEMESTER	II (B.A Part-I)
PAPER NO	Elective GE2
PAPER CODE	ECK202/ELGE-2
TITLE	Macro Economics

- 1. Nature and significance of Macroeconomics, Circular Flow of Income.
- 2. Money Role of Money in Planned and Unplanned Economy,
- 3. Value of Money Quantity Theory of Money, Fisherion and Combridge Version.
- 4. Inflation Causes, Effects and Control of Inflation.
- 5. Objective of Monetary Policy.
- 6. Banking Functions of Central and Commercial Banks, Credit Creation, Methods of Credit Control .
- 7. I.M.F, I.B.R.D Objectives & Functions.

- M.C. Vaish, Monetary Theory.
- T. T. Sethi, MaudrikArthshastra and AntarrashtriyaVyapar.
- M. L. Seth, Monetary Theory.
- M. L. Jhingan, SamshthiArthshastra.

SEMESTER	III (B.A Part-II)
PAPER NO	Elective GE3
PAPER CODE	ECK301/ELGE-3
TITLE	Public Finance & International Trade

- 1. Nature and Scope of Public finance, Distinction between Private and Public finance.
- 2. Principles of Maximum Social Advantage. Market Failure, Role of the Government.
- 3. Principle of Taxation Ability to Pay Theory.
- 4. Growth of Public Expenditure Causes and Effects.
- 5. International Trade Comparative Cost Theory of International Trade.
- 6. Gains from International Trade.
- 7. Balance of Payments and Methods of correcting Adverse Balance of Payments.
- 8. W.T.O

- M. L. Jhingan, Lokvitta and Arthrrashtiya Vyapar.
- T.T Sethi, Mudra, Banking and Antarrashtriya Vyapar.
- B. P. Tyagi, Public Finance.
- H.N.P.S, Suman RajashwaKeSiddhant.

SEMESTER	IV (B.A Part-II)
PAPER NO	Elective GE4
PAPER CODE	ECK404/ELGE-4
TITLE	Indian Economy

- 1. Characteristics of Indian Economy.
- 2. Population Size, Growth and Population Policy.
- 3. Natural Resources Forest Policy, Energy Policy.
- 4. Agriculture Causes of Backwardness of Indian Agriculture.
- 5. New strategy of Agriculture Development, Green Revolution.
- 6. Agricultural Credit Cooperatives, Commercial Banks, Rural Banks, NABARD.
- 7. Industrial Policy.
- 8. Large scale Industries Iron and Steel, Cotton Textile and Sugar.
- 9. Small Scale Industries Importance and Problems.
- 10. Important Areas of Concern Poverty and nequality, Unemployment, Rising Prices.
- 11. Basic Features of the Jharkhand Economy Demography, Agriculture, Industries, State Economic Policy.

- Mishra and Puri, BharatiyaArthshstra.
- Mishra and Puri, Indian Economy.
- S.C. Gupta, AdhunikArthvyavashtha.
- R.Dutta and K.P.M. Sundaram, Indian Economy.
- A.N. Agarwal, Indian Economy Problmes and Developments.

Syllabus of U.G, B.A. Programme (General)

SEMESTER	1
PAPER NO	I (Core)
PAPER CODE	ECDSC101/G
TITLE	Micro Economics

- 7. Micro and Macro Economics.
- 8. Marshallian utility analysis and indifference curve analysis of consumer behavior.
- 9. Law of Demand, Elasticity of Demand, Consumers surplus.
- 10. Laws of Returns, Theory of Production.
- 11. Concept of costs and Revenue, Analysis of Cost Curves and Revenue Curves.
- 12. Market forms Perfect and Imperfect markets Equilibrium of a firm Perfect competition and monopoly.
- 13. Price discrimination under perfect competition and monopoly.
- 14. Marginal Productivity theory of Distribution, Rent Ricardian and Modern theory of Rent, Wages –Demand and supply, Theory of wages, Interest Classical and Liquidity Preference theory of Interest, Profit Knight's and Schumpeter's Theory of Profit.

- Jain, K.P. 'ArthshastraKasiddhanat.
- Jhingan, M. L. 'VyasthiArthshastra.
- Stonier and Hague, A Text Book of Economic Theory.
- M. L. Seth ArthshastraKeSinddhant.

SEMESTER	II
PAPER NO	II (Core)
PAPER CODE	ECDSC201/G
TITLE	Macro Economics

- 8. Nature and significance of Macroeconomics, Circular Flow of Income.
- 9. Say's Law of market and thee classical theory of employment; Keynes objection to the classical theory.
- 10. Consumption function average and marginal propensity to consume.
- 11. Value of Money Quantity Theory of Money, Fisherion and Combridge Version.
- 12. Inflation Causes, Effects and Control of Inflation.
- 13. Objective of Monetary Policy and Fiscal Policy.
- 14. Banking Functions of Central and Commercial Banks, Credit Creation, Methods of Credit Control.
- 15. I.M.F , I.B.R.D Objectives & Functions.

- M.C. Vaish, Monetary Theory.
- T. T. Sethi, MaudrikArthshastra and AntarrashtriyaVyapar.
- M. L. Seth, Monetary Theory.
- M. L. Jhingan, SamshthiArthshastra.

SEMESTER	III
PAPER NO	III (Core)
PAPER CODE	ECDSC301/G
TITLE	Public Finance & International Trade

- 1. Nature and Scope of Public finance, Distinction between Private and Public finance.
- 2. Principles of Maximum Social Advantage. Market Failure, Role of the Government.
- 3. Sources of Public revenue: Taxation meaning, cannons and classification of taxes.
- 4. Principle of Taxation Ability to Pay Theory.
- 5. Taxable capacity; Effects of taxation; characteristics of a goods tax system.
- 6. Growth of Public Expenditure Causes and Effects.
- 7. Theories of International Trade; Absolute advantage, comparative advantage and Opportunity cost Theory of International Trade.
- 8. Gains from International Trade.
- 9. Balance of Payments and Methods of correcting Adverse Balance of Payments.

- M. L. Jhingan, Lokvitta and Arthrrashtiya Vyapar.
- T.T Sethi, Mudra, Banking and AntarrashtriyaVyapar.
- B. P. Tyagi, Public Finance.
- H.N.P.S, Suman RajashwaKeSiddhant.

SEMESTER	IV
PAPER NO	IV (Core)
PAPER CODE	ECDSC401/G
TITLE	Indian Economy

- 12. Characteristics of Indian Economy.
- 13. Population Size, Growth and Population Policy.
- 14. Natural Resources Forest Policy, Energy Policy.
- 15. Agriculture Causes of Backwardness of Indian Agriculture.
- 16. New strategy of Agriculture Development, Green Revolution.
- 17. Agricultural Credit Cooperatives , Commercial Banks, Rural Banks, NABARD.
- 18. Industrial Policy.
- 19. Large scale Industries Iron and Steel, Cotton Textile and Sugar.
- 20. Small Scale Industries Importance and Problems.
- 21. Important Areas of Concern Poverty and nequality, Unemployment, Rising Prices.

- Mishra and Puri, BharatiyaArthshstra.
- Mishra and Puri, Indian Economy.
- S.C. Gupta, AdhunikArthvyavashtha.
- R.Dutta and K.P.M. Sundaram, Indian Economy.
- A.N. Agarwal, Indian Economy Problmes and Developments.

SEMESTER	V
PAPER NO	V
PAPER CODE	ECDSE501/G
TITLE	Demography (or) Industrial Economics

Unit 1: Introduction

Demography – Meaning, importance, relation with other disciplines.

Unit 2: Population Study

Population study, Malthusian Theory of Population, Optimum theory of Population and theory of Demographic Transition, Historical evidence of Population growth in developed and developing countries.

Unit 3: Sources of Demography Data in India

Sources of Demography data in India, Census- civil registration system and demographic surveys, National Family Health Survey – I and II – their relative merits and demerits.

Unit 4: Structure of Population

Population trends in the Twentieth Century, Population explosion - Threatened or real, distant or imminent, International aspects of population growth and distribution, Pattern of age and sex structure in more developed and less developed countries, determinants of age and sex structure, Demographic effects of sex and age structure, economic and social implications, Age Pyramids and projection, Individual ageing and population ageing.

Unit 6: Population Policy

Salient features of Population census of 2001, and 2011; evolution of population policy in India, Shift in Policy -focus from population control to family welfare and to women empowerment; demographic status and household behaviour — education, women's autonomy and fertility population, Health, Poverty and Environment linkage in India, the New Population Policy.

Basic Reading List:

- Agarwala, S.N. (1972), India's Population Problem, Tata McGraw Hill Co. Bombay.
- Boss, A. (1996), India's Basic Demographic, Statistics, B.R. Publishing Corporation, New Delhi.
- Bogue, DJ. (1971), Principles of Demography, John Wiley New York.
- Chenry, H. and T.N. Srinivasm (Eds) (1989), Handbook of Development Economic, Vol. 1& 2, Elsevier, Amsterdam.
- Choubey , P.K. (2000), Population Policy in India, Kanishka Publication, New Delhi.
- Coale, A.J. & E.M. Hoover 91958), Population Growth & Economic Development in Low Income Countries: A case study of India's Prospects, Princeton University Press, Princeton.

OR

INDUSTRIAL ECONOMICS

Unit 1: Introduction

Industry and Economic development, industry and sectoral linkages, Industrial classification and data information .

Unit 2: Industrial Organization and Ownership Structure

Public, Private, Joint and Co- operative sectors; Private corporate sector, MNCs and their role, Industrial competition and Monopoly, corporate governance.

Unit 3: Pricing of Industrial products

Industrial Pricing and Market structure, Pricing in India.

Unit 4: Location and Dispersion

Location of Industries —theories of location, Diversification, Integration and merger of Industrial Units, Dispersion and problems of regional imbalance.

Unit 5: Composition of industrial sector

Significance of major large scale Industries, Small scale Industries and Village Industries and Rural Industrialization – emerging global competition and Indian Industry.

Basic Reading List

- 1) Desai, B. (1999), Industrial Economy in India, Himalaya Publishing House, Bombay.
- 2) Singh and Sadhu, Industrial Economy in India, Himalaya Publishing House, Bombay.

SEMESTER	V
PAPER NO	Elective (GE-I)
PAPER CODE	EC/GE - 501
TITLE	Basic Statistics

Unit 1: Introduction to Statistics

Definition and Scope, Data Collection, Primary and Secondary data, Census and sampling methods, Graphic, Diagrammatic and Tabular Presentation of data.

Unit 2: Central Tendency and Dispersion

Measures of Central tendency, Mean, Median, Mode, Geometric Mean and Harmonic Mean, Measures of Dispersion, Range, Mean Deviation, Standard Deviation, Coefficient of variation, Moments, Skewness and Kurtosis.

Unit 3: Correlation and Regression

Correlation – simple, coefficient of correlation – Karl Pearson and rank Correlation, Regression Analysis, Least squares Method, Interpretation of Regression Coefficient, Time Series, Concept and Estimation of Trend line.

Unit 4: Index Number and their applications.

- Allen, R.G.D (1974), Mathematical Analysis for Economist, Macmillan press and ELBS, London.
- Chiang. A.C. (1986), Fundamental Methods of Mathematical Economics, MCGraw Hill, New York.
- B.N. Gupta Statistics.
- S.P. Gupta Statistical Methods.

SEMESTER	VI
PAPER NO	VI
PAPER CODE	ECDSE601/G
TITLE	Economics of Education and Health (or) Agriculture Economics

Unit1: Concept of Economics of Education-Educational production function; Education, productivity and income; Educational indicators; Education and Economic development; Human development-concept and measurement; Educational costs and benefits-Educational cost function, cost benefit model; Educational planning and manpower; NGOs and Human Resource Development.

Unit 2: Economics of Health-Concept, dimensions and indicators; Determinants of health status; Disease burden and its measurement; Hospital as a firm; Economic appraisal in health care — Cost benefit and cost effectiveness approaches; Health planning and management; Primary health care and health for all; Community health care; Environment and health; International health organization — WHO and other United Nations agencies.

Unit 2: India's Educational system – Problems and suggestions; Human capital in India; National policy on education and health; Health programme and infrastructure; Financing of education and health programmes in India; Expenditure on health and education during post reform period; Health care system in India; Health, poverty and economic growth in India.

Basic Readings

- Mark Blaug: Economics of Education: Selected Readings, vol. I and II Edward Elger.
- Schultz, T.W.: Investment in Human Capital
- Ritzen, J.M.M.: Education, Economic Growth and Income Distribution.
- Folland, Goodman and Stano; The Economics of Health and Health Care.
- Thomas E. Getzen: Health Economics.
- Mahbubul Hag: Quality of life.
- Martha Nussbaum and Amartya Sen: Quality of life.
- Human Development Report 2007.
- National Human Development Report 2001.
- Report on National Commission on Macroeconomics and Health (2015 onward)
- Economics Survey (2015 onward)

Agriculture Economics

Unit 1: Rural Economy of India

Structure of the India economy – Place of Agriculture in Rural Economy, Composition of the India rural economy, Farm sector and non – farm sector, diversification of agriculture and allied activities (Fisheries, Horticulture, Floriculture), Forestry in India – Its growth, Problems and State policies, Rural industrialization – food processing and Agro based industries, Development of rural infrastructure.

Unit 2: Development of Agriculture

Role and importance of agriculture in economic development, linkages between the agriculture sector and the non – agriculture sector, changing nature of linkages; Agricultural resources in India – Land utilization and Cropping pattern, Irrigation in India; Trends in agriculture growth and agricultural productivity, pattern of agricultural development..

Unit 3: Agrarian Relation and Land Reforms in India

Agrarian relation – Historical evolution and land reforms program during 1950's and reforms; programs and performance during the 1970's and after.

Unit 4: Index Number and their applications.

- Bhaduri, A. (1984), The Economic Structure of Back ward Agriculture, Macmillan, Delhi.
- Bilgrami, S.A.R.)1966) Agricultural Economics, Himalaya Publishing House, Delhi.
- Dantwala, M.L. et. Al (1991) Indian Agricultural Development Since Independence, Oxford and IBH, New Delhi.
- Government of India (1976), Report of the National Commission on Agriculture, New Delhi.

SEMESTER	VI
PAPER NO	Elective (GE-II)
PAPER CODE	EC/GE – 601
TITLE	Economics of Social Sector and
	Environment.

Unit 1: Measurement of Environment Values

Use values, Option values and non-use values; Valuation methods-based on observed market behavior, Hedonic property values and household production models (Travel cost method and household heath production function), Methods based on response to hypothetical markets, Contingent valuation methods.

Unit 2: Economics of Natural Resource Management and Sustainable Development

Theories of optimal use of exhaustible and renewable resources; Concept of sustainable development. Micro economic policies and development.

Unit 3: Environment and Natural Resource Problems in India.

Mechanism for environment regulation in India; Environmental laws and their implementation, Policy instruments for controlling air and water pollution in India.

- Hussen, A.M. (1999) Principles of Environmental Economics, Routledge, London.
- Shankar, U. (2001) Environmental Economics, Oxford University press, New Delhi.