

**DEPARTMENT OF ECONOMICS**  
**Faculty of social sciences**  
**Dayalbagh Educational Institute**

**MINUTES OF BOARD OF STUDIES (2017)**

Minutes of the meetings of the Board of Studies of Economics held on (i) March 21, 2017 at 11:30 am and (ii) March 23, 2017 at 11.30 am. The following members were present.

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|---------------------------|-----------------|
| 1. Prof. S. P. Srivastava | Chairperson     |
| 2. Pro. V. Upadhyay       | External Expert |
| 3. Prof. Abha Mittal      | External Expert |
| 4. Dr. Sangeeta Kumar     | Internal Member |
| 5. Dr. Jyoti Gogia        | Internal Member |
| 6. Dr. Rupali Satsangi    | Internal Member |
| 7. Dr. Resham Chopra      | Internal Member |

1. The Committee reviewed the existing syllabi of all the courses. As it has been decided earlier to revise syllabus in phases, the syllabus of Economics Honours has been proposed to revise from session 2017-18. (Annexure I)
2. Honours Syllabus has been revised specifically on the basis of the recommendations of the experts.
3. The Committee also reviewed experts list, question banks and updated the suggested readings.

The meeting ended with vote of thanks

Prof. S. P. Srivastava  
(Chairperson)

**Department of Economics  
Faculty of social sciences  
Dayalbagh Educational Institute**

**Proposed Course Structure Board of Studies 2017-18  
Proposed Changes**

**ECM 501 (Microeconomic Analysis)**

1	Department proposing the course	Economics
2	Course Title	Microeconomic Analysis
3	L-T-P Structure	Periods (55 mts. Each)/week:5 (L-5+T-0+P-0) min.pds./sem.:65
4	Credits	5
5	Course Number	ECM 501
6	Status	Major Course
7	Status vis- a – vis other course (course number/ title)	NA
8	Overlap with any UG/PG course of another Dept./Centre	NA
9	Faculty who will teach the course	Prof. L.R. Kulshrestha
10	Will the course require visiting faculty?	No
11	Course objectives including motivation and aims	The students already have an orientation in the subject at elementary level. An attempt has been made to provide in-depth concepts for better understanding of issues involved.

S. No.	Course No.	Existing Contents	Revised	Justification
1.	ECM 501	<b>UNIT 1: THEORY OF CONSUMER BEHAVIOUR</b> Consumer Behaviour-Utility Curve Approach; Indifference Curve Approach; Revealed Preference Analysis; Recent Developments in the theory of market demand.	<b>UNIT 1: MARKET STRUCTURE AND EQUILIBRIUM</b> Preference; utility; budget constraint; choice; demand; Slutsky equation; buying and selling; choice under risk and inter temporal choice; revealed preference Market forms – perfect and imperfect forms – the concept of normal profit – monopoly profit-equilibrium of a firm under perfect competition, monopoly, monopolistic competition, duopoly and oligopoly – price discrimination and measure of monopoly power – control and regulation of monopoly – collusive price leadership – kinked demand curve-taxation and equilibrium of a firm- Different Pricing Strategies: Capturing consumer surplus; peak-load pricing; quality discrimination, dumping in international market.	Theory of consumer behaviour has already been covered in ECM 101, therefore, to avoid repetition unit 1 has been changed to Market structure and equilibrium

2.	ECM 501	<b>UNIT 2: THEORY OF PRODUCTION &amp; COST</b> Production with one variable input; Production Function; Laws of Production; Production with two variable inputs; MRTS; Elasticity of Substitution, Laws of Returns/Scale; Cobb-Douglas production function; Revenue Concept-AR and MR; Optimal Input Combination; Cost Concepts (Fixed, variable & marginal).	<b>UNIT 2: PRICING METHODS</b> Mark up pricing – break even pricing – rate of return pricing – variable cost pricing – peak load pricing – going rate pricing – controlled or administered pricing – minimum support price.	Unit 2 has already been covered in ECM 101 therefore, it has been replaced with pricing methods
3.	ECM 501	<b>UNIT 3: PRICE AND OUTPUT DETERMINATION</b> Pricing and Equilibrium of the firm under perfect competition; Pricing and Equilibrium of the firm under Monopoly; Pricing and Equilibrium of the firm under Discriminating Monopoly; Pricing and Equilibrium of the firm under Oligopoly. Cournot and the kinked demand curve model-Monopolistic Competition-Chamberlin's Model	<b>UNIT 3: FACTOR PRICING</b> Market for the factors of production – marginal productivity theory of pricing of factor (distribution theory) – Euler's theorem-linkages among the factors of production – theories of wages – determination – wages and collective bargaining – wage differentials – rent – Ricardian and modern theories of rent – scarcity rent – differential rent and quasi rent – interest – classical and Keynesian theories – profit – innovation, risk and uncertainty theories – the concept of normal profit – monopoly profit. Different Pricing Strategies: Capturing consumer surplus; price discrimination – first, second and third degree price discrimination; peak-load pricing; quality discrimination, dumping in international market.	The contents of unit 3 have been shifted to unit 1 with elaborated version.
4.	ECM 501	<b>UNIT 4: FACTOR PRICING &amp; INCOME DISTRIBUTION</b> Factor Price Determination under Perfect competition; Factor Price Determination under Imperfect competition; Theories related to the determination of Rent, Interest, Profit & Wages.	<b>UNIT 4: FACTOR MARKET</b> Payback period – average annual rate of return, net present value, internal rate of return, price changes, risk and uncertainty – elements of social cost benefit analysis.	The unit has been changed and the contents have been revised to avoid repetition.
5.	ECM 501	<b>UNIT 5: WELFARE ECONOMICS</b> Definition & Nature; Classical & Neo-Classical Welfare Economics; Paratian Welfare Economics; Pareto	<b>UNIT 5: WELFARE ECONOMICS</b> What is welfare economics – economic and welfare problems in measuring welfare – classical welfare economics – Pigovian welfare condition – Pareto's criteria – value judgment – concept of a social welfare function-compensation principle –	The contents have been specified

	Optimality under Perfect competition; Compensation Criteria for Welfare Judgment.	the Kaldor- Hicks criterion.	
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Note: Reading list has been revised.

### ECM 502 (Indian Economic Development –II)

1	Department proposing the course	Economics
2	Course Title	Indian Economic Development -II
3	L-T-P Structure	Periods (55 mts. Each)/week:5 (L-5+T-0+P-0) min.pds./sem.:65
4	Credits	5
5	Course Number	ECM 502
6	Status	Major Course
7	Status vis- a – vis other course (course number/ title)	NA
8	Overlap with any UG/PG course of another Dept./Centre	NA
9	Faculty who will teach the course	Dr. Resham Chopra
10	Will the course require visiting faculty?	No
11	Course objectives including motivation and aims	After studying the structure aspects of Indian Economy, students will be exposed to economic reforms in India and problems of Indian economy. A little understanding of India and Global economy is also included.

S. No.	Course No.	Existing Contents	Revised	Justification
1	ECM 502		New Course	

Note: The course has been replaced with ECM 503 Computer Applications in Economic Analysis. . The current proposed course orients the students with the structure , problems like unemployment, poverty and their measures, economic reforms and global economy vis-à-vis Indian economy at advanced level.

#### Course Number: ECM502, Course Title: INDIAN ECONOMIC DEVELOPMENT II

Class: BA/BA(SS), Status of Course: MAJOR COURSE, Approved since session: .....

Total Credits:5, Periods(55 mts. each)/week:5(L-5+T-0+P/S-0), Min.pds./sem.:65

#### UNIT 1 STRUCTURE OF THE INDIAN ECONOMY

Organising an Economy; Evolution of the Indian Economy – planned and mixed economy; Role of State in Indian Economy; Sectors of Indian Economy; Uniqueness of the Indian Economy; The structural change of Indian economy since independence– sectoral aspects of Indian Economy

#### UNIT 2 INDIA'S NATIONAL INCOME

Trend and pattern of India's per capita income and GNP since 1991; Changing contribution of different sectors in NI; Social Security Measures given in recent times by GOI

#### UNIT-3 POVERTY AND INEQUALITY

Poverty - The concept and measurement of poverty, Causes of poverty and Remedies; Unemployment - concept and measurement of unemployment, Causes of unemployment and Remedies  
Economic Inequality - Concept and measurement of Economic Inequality, Causes of Economic Inequality and Remedies, State inequality,

#### UNIT 4 ECONOMIC REFORMS IN INDIA

Need and objectives of reforms in India, Economic Reforms – Liberalisation, Privatisation, Globalisation, Financial, Fiscal and Monetary Reforms, Major developments in Indian economy in the post reform period

### UNIT 5 INDIA AND THE GLOBAL ECONOMY

An Introduction, Global Economy Today, Euro zone Crisis, Changing Dynamics, India and BRICS; ASEAN, SAARC, Prospects for India, India's External Sector –Composition of exports and imports, Major trading partners (US, EU, West Asia) and India's contribution

### SUGGESTED READINGS:

Misra, S.K &Puri, V.K: Indian Economy, Himalaya Publishing House Pvt Ltd, 32nd edn, 2014

Kapila, Uma: Indian Economy: Performance and Policies, 2013, Academic Foundation

Deepashree, Indian Economy: performance and Policies, Tata McGraw Hill, 2008

Economic Survey 2014-15, Ministry of Finance, Govt. of India, New Delhi

### ECM 503 (Statistical Methods for Economics – II)

1	Department proposing the course	Economics
2	Course Title	Statistical Methods For Economics - II
3	L-T-P Structure	Periods (55 mts. Each)/week:5 (L-5+T-0+P-0) min.pds./sem.:65
4	Credits	5
5	Course Number	ECM 503
6	Status	Major Course
7	Status vis- a – vis other course (course number/ title)	NA
8	Overlap with any UG/PG course of another Dept./Centre	NA
9	Faculty who will teach the course	Ms. Ruby Singh
10	Will the course require visiting faculty?	No
11	Course objectives including motivation and aims	This paper will enable the students in understanding the various concepts and tool of data analysis which will help them to make project.

S. No.	Cours e No.	Existing Contents	Revised	Justification
1.	ECM 503	<b>UNIT 1: REGRESSION ANALYSIS</b> Simple Regression; Coefficient of Regression; Partial Correlation; Multiple Correlation in case of three variables; Interpretation of Formulae without proof.	<b>UNIT 1: INTRODUCTION TO SAMPLING DISTRIBUTIONS</b> Population versus sample, Methods of sampling, simple random sample, sampling distribution of sample mean for normal and non-normal populations, Chebyshev's inequality, law of large numbers, optimum size of sample, central limit theorem	one new concepts are introduced like chebyshev's inequality etc for an in depth understanding of the subject
2.	ECM 503	<b>UNIT 2: SAMPLING THEORY AND TESTS OF SIGNIFICANCE</b> Standard error, Sampling of Attributes, Sampling of Variables, Z-test, T-test, F-test.	<b>UNIT 2: INTRODUCTION TO STATISTICAL INFERENCE</b> Properties of point estimator - unbiasedness, relative efficiency and consistency, Testing of Hypothesis - type I and type II errors, level of significance, power of a test, Use of z, chi-square, t and F statistics - large sample	Contents have been elaborated and specified for more clarity

			and small sample tests for mean, one tail and two tail tests for difference of means, Chi-square test for (i) goodness of fit and (ii) independence of two attributes, F-test for ratio of two variances, one-way analysis of variance, confidence intervals for mean and variance	
3.	ECM 503	<b>UNIT 3: ASSOCIATION OF ATTRIBUTES</b> Consistency of data, Co-efficient of consistency; Classification according to attributes, Association of attributes, Contingency Table, Chi-Square & Coefficient of Contingency.	<b>UNIT 3: SIMPLE REGRESSION AND CORRELATION</b> Simple linear regression; method of least squares; linear and exponential trend; Product moment – covariance, correlation, rank correlation	Regression and correlation found more important for students. Therefore, has been replaced with Association of Attributes
4.	ECM 503	<b>UNIT 4: INTERPOLATION &amp; EXTRAPOLATION</b> Graphic and algebraic methods, Parabolic, Binomial and Newton's method.	<b>UNIT 4: TIME SERIES</b> Definition and components of a time series; seasonal variations – measuring through -a) simple average method- and ratio to trend method – cyclical variations – measuring through residual method – trend and its measurement through a) method of moving averages and method of least squares (annual production, sales, profit. etc.) – fitting a second degree trend (population growth) – growth curves, logistic curve;	Time series found more important than Interpolation and extrapolation
5.	ECM 503	<b>UNIT 5: ANALYSIS OF TIME SERIES</b> Meaning and importance of time series, Components, measures of Long term trends, Measures of Seasonal, Cyclical and Random fluctuations.	<b>UNIT 5: INDEX NUMBERS</b> Definition of index number – types of index number – price index-quantity index –value index – simple index number – weighted index number – construction of index number – problems in construction – methods in construction – simple and weighted – Laspeyre's price index (cpi in india) – Paasche's price index – Fisher's ideal index – splicing of index number – deflating	Index number has been added It was found that index number was important for study and will help in developing understanding regarding price index.
Note: Sequence of the course has been changed from ECM 504 to ECM 503 to maintain the uniformity. Reading list has been revised				

#### ECM 504 (History of Economic Thoughts)

1	Department proposing the course	Economics
2	Course Title	History of Economic Thoughts
3	L-T-P Structure	Periods (55 mts. Each)/week:5 (L-5+T-0+P-0) min.pds./sem.:65

4	Credits	5
5	Course Number	ECM 504
6	Status	Major Course
7	Status vis- a – vis other course (course number/ title)	NA
8	Overlap with any UG/PG course of another Dept./Centre	NA
9	Faculty who will teach the course	Dr. S. Kumar
10	Will the course require visiting faculty?	No
11	Course objectives including motivation and aims	This course, tracing the history of economic thought, would enable the student to understand how contemporary economics came to be what it is.

S. No.	Course No.	Existing Contents	Revised	Justification
1.	ECM 504	<b>UNIT 1: EARLY PERIOD</b> Mercantilism: Main Characteristics; Physiocracy; natural order; Primacy of agriculture, Social classes, tableau Economique, taxation, turgot- Economic ideas of petty, Locke and Hume.	<b>UNIT 1: EARLY PERIOD</b> Nature and importance of history of economic thought – ancient economic thought – Aristotle, Plato. Mercantilism: Main Characteristics; Physiocracy; natural order; Primacy of agriculture, Social classes, tableau Economique, taxation	Introductory part has been added. Economic ideas of petty, Locke and Hume have been deleted according to the relative importance.
2.	ECM 504	<b>UNIT 2: CLASSICAL PERIOD</b> Adam Smith: Views on division of labour, theory of value, capital accumulation, distribution, trade and economic development; David Ricardo: main contributions in brief; Thomas Robert Malthus: Theory of Population, J.B. Say: Laws of Market; J. S. Mill: Restatement of the Classical Theory.	<b>UNIT 2: CLASSICAL PERIOD</b> Adam Smith: Views on division of labour, theory of value, capital accumulation, distribution, trade and economic development; David Ricardo: main contributions in brief; Thomas Robert Malthus: Theory of Population, and Gluts Theory, J.B. Say: Laws of Market; J. S. Mill: Restatement of the Classical Theory.	No Change
3.	ECM 504	<b>UNIT 3: MARGINALISTS</b> Marshall as a great synthesizer; role of time in price determination, economic methods, ideas on consumer's surplus, elasticities, prime and supplementary costs, representative firm, external and internal economies, quasi-rent, organization as a factor of production, nature of profits; Pigou; welfare economics.	<b>UNIT 3: THE MARXIAN CHALLENGE AND MARGINAL REVOLUTION</b> Karl Marx - A Contribution to the Critique of Political Economy, William Stanley Jevons - The Theory of Political Economy, Alfred Marshall - Principles of Economics, Eugen von Bohm-Bawerk - The Positive Theory of Capital	Unit title and contents have been reframed to maintain proper sequence.
4.	ECM 504	<b>UNIT 4: KEYNESIAN IDEAS</b> The aggregate economy, Liquidity preference theory and Liquidity trap; Marginal Efficiency of Capital and Marginal	<b>UNIT 4: KEYNESIAN IDEAS</b> The aggregate economy, Liquidity preference theory and Liquidity trap; Marginal Efficiency of Capital and	No Change

	efficiency of investment, wage rigidities under employment equilibrium, role of fiscal Policy; deficit spending and public works, Multiplier Principle.	Marginal efficiency of investment, wage rigidities under employment equilibrium, role of fiscal Policy; deficit spending and public works, Multiplier Principle	
Note: The course number has been changed from ECM 502 to ECM 504 to maintain proper sequence. Reading list has been revised.			

### ECM 601 (Macroeconomic Analysis and Policy)

1	Department proposing the course	Economics
2	Course Title	Macroeconomic Analysis and Policy
3	L-T-P Structure	Periods (55 mts. Each)/week:5 (L-5+T-0+P-0) min.pds./sem.:65
4	Credits	5
5	Course Number	ECM 601
6	Status	Major Course
7	Status vis- a – vis other course (course number/ title)	NA
8	Overlap with any UG/PG course of another Dept./Centre	NA
9	Faculty who will teach the course	Prof. L.R. Kulshrestha
10	Will the course require visiting faculty?	No
11	Course objectives including motivation and aims	After studying the aggregated the students will be exposed to macroeconomic dynamics to closed and open economy.

S. No.	Course No.	Existing Contents	Revised	Justification
1.	ECM 601	<b>UNIT 1: NATIONAL INCOME ACCOUNTING</b> Concepts, Components & Measurement of National Income, Measuring Price changes, Problems of Measurement; Sector Accounts-Business Sector, Household Sector, Government Sector, Foreign Sector; Circular flow of Income in an economy; National Income & Economic Welfare.	<b>UNIT 1: CONSUMPTION AND INVESTMENT FUNCTION</b> Consumption – absolute income hypothesis, relative income hypothesis, life cycle hypothesis, permanent income hypothesis – investment (business fixed investment, residential investment and inventory investment) – neo-classical theory of investment – accelerator theory of investment	Unit 1 National income accounting has already been covered in ECM 201. Therefore, it has been replaced with consumption and investment function.
2.	ECM 601	<b>UNIT 2: CLASSICAL THEORY OF OUTPUT &amp; EMPLOYMENT</b> Say's Law of markets & quantity theory of money; Classical Model; Price & Wage flexibility & full employment; Keyne's criticism of the Classical theory of Income & Employment.	<b>UNIT 2: THE CLOSED ECONOMY IN THE SHORT RUN</b> The goods market and derivation of IS curve – real influences and Shift in IS schedule – the money market and derivation of LM curve – the shift in LM curve – determination of equilibrium income and interest rates – the relative efficacy of fiscal and	Unit 2 has already been covered in ECM 201. Therefore, it has been replaced and the advanced contents have been added in align with other universities.



			monetary policy.	
3.	ECM 601	<b>UNIT 3: KEYNE'S THEORY OF INCOME &amp; EMPLOYMENT</b> Principle of Effective Demand-Aggregate Supply Curve-Aggregate Demand Curve; Determination of the Equilibrium Level of Income Price & Employment; Consumption Function-APC, MPC; Determinants of C.F.; Keyne's Psychological Law of Consumption; Post-Keynesian Theories of Consumption-Relative Income Theory, Life Cycle Theory; Permanent Income Theory.	<b>UNIT 3: THE AGGREGATE DEMAND AND SUPPLY</b> The derivation of aggregate demand and supply curves – the Keynesian aggregate demand with vertical aggregate supply curve – sources of wage rigidity and unemployment – the flexible price with fixed money wage model – labour supply and money wage – the shift in aggregate supply – Keynes vs. Classics.	Unit title and contents have been modified.
4.	ECM 601	<b>UNIT 4: INVESTMENT DEMAND THEORY</b> Determinants of Inducement to Invest; MEC; Investment demand curve; Concept of Investment Multiplier; Acceleration Principle; Saving & Investment Relationship, IS-LM Curve analysis & their interaction.	<b>UNIT 4: INFLATION AND UNEMPLOYMENT</b> Inflation: concepts and consequences- The Phillips curve – the natural rate of unemployment – factors affecting natural rate of unemployment – the adaptive expectation and long-run Phillips curve – the concept of rational expectations – policy ineffectiveness debate.	To avoid repetition the unit title and contents have been revised
5.	ECM 601	<b>UNIT 5: TRADE CYCLE</b> Nature & Characteristics, Hawtrey's Monetary Theory & Hayek's Over Investment Theory, Keynes view on trade cycles; The concept of Accelerator, Samuelson & Hicks; Multiplier-Accelerator interaction model control of trade circles.	<b>UNIT 5: OPEN ECONOMY MODELS</b> The Mundell – Fleming model: determining equilibrium output in a small open economy; the monetary and fiscal policy under flexible and fixed exchange rate regimes; the Mundell- Fleming model with changing price level.	To avoid repetition and to make the course in align with other universities, the unit title and contents have been revised
Note: Reading list has been revised				

#### ECM 602 (Industrial Economics)

1	Department proposing the course	Economics
2	Course Title	Industrial Economics
3	L-T-P Structure	Periods (55 mts. Each)/week:5 (L-5+T-0+P-0) min.pds./sem.:65
4	Credits	5
5	Course Number	ECM 602
6	Status	Major Course
7	Status vis- a – vis other course (course number/ title)	NA
8	Overlap with any UG/PG course of another Dept./Centre	NA

9	Faculty who will teach the course	Prof. S.P. Srivastava
10	Will the course require visiting faculty?	No
11	Course objectives including motivation and aims	To give knowledge regarding industrial economics to students

S. No.	Course No.	Existing Contents	Revised	Justification
1	ECM 602		<b>No Change</b>	

Note: There is no change in ECM 602

### ECM 603 (Basic Econometrics)

1	Department proposing the course	Economics
2	Course Title	Basic Econometrics
3	L-T-P Structure	Periods (55 mts. Each)/week:5 (L-5+T-0+P-0) min.pds./sem.:65
4	Credits	5
5	Course Number	ECM 603
6	Status	Major Course
7	Status vis- a – vis other course (course number/ title)	NA
8	Overlap with any UG/PG course of another Dept./Centre	NA
9	Faculty who will teach the course	-
10	Will the course require visiting faculty?	Yes
11	Course objectives including motivation and aims	Econometric methods have proved particularly useful for understanding the interrelationships in the economic variables. Use of econometrics has given greater precision in establishing such relationships.

S. No.	Course No.	Existing Contents	Revised	Justification
1	ECM 603		<b>New Course</b>	

Note: The course Basic Econometrics has been newly constructed and it will be beneficial to the students as it provides the tools to enable the students to extract useful information about important economic policy issues.

**Course Number: ECM603, Course Title: BASIC ECONOMETRICS**

Class: BA(SS) Honours, Status of Course: MAJOR COURSE, Approved since session: .....

Total Credits:5, Periods(55 mts. each)/week:5(L-5+T-0+P/S-0), Min.pds./sem.:65

**UNIT 1: NATURE AND SCOPE OF ECONOMETRICS & REVIEW OF STATISTICS**

Meaning and Methodology of Econometrics, Descriptive Statistics- a. univariate case b. bivariate case, Random Variables and Probability distributions, Estimation of Parameters; Hypothesis Testing

**UNIT 2: SIMPLE LINEAR REGRESSION MODEL**

Specifications of the Model – Assumptions – Deriving the Ordinary Least Squares (OLS) Estimates – Gauss Markov Theorem – Estimation of the Error Variance – Statistical Inference in the Linear Regression Model – Confidence Intervals for the Estimated Parameters and the Testing of Hypotheses – Coefficient of Determination – Prediction with the Simple Regression model

**UNIT 3: CLASSICAL MULTIPLE LINEAR REGRESSION MODEL**

Least squares estimation;  $R^2$  and adjusted  $R^2$ ; Partial correlations, Classical Model: Gauss Markov Theorem; Standard errors of estimate; Standard errors of regression coefficients, Tests of hypotheses: Single parameters; Sets of parameters, Forecasting

**UNIT 4: VIOLATIONS OF CLASSICAL ASSUMPTIONS**

MULTICOLLINEARITY, HETEROSCEDASTICITY, AUTOCORRELATION

**UNIT 5: DISTRIBUTED LAG MODEL AND DUMMY VARIABLE**

Application of Distributed Lag Model and Autocorrected Error Models in sort run demand analysis, Koyck Model, Nerlove model.

**SUGGESTED READINGS:**

D. N. Gujarati (2003): "Essentials of Econometrics", 3rd Edition, McGraw Hill.

C. Dougherty (2007): "Introduction to Econometrics", 3rd Edition, Oxford University Press.

RamuRamanathan (2002): "Introductory Econometrics with Applications", 5th Edition, South-Western

Koutsoyiannis A: Theory of Econometrics E L B S/ Macmillan

Jay L. Devore, Probability and Statistics for Engineering and the Sciences, Cengage Learning, 2014

Software Packages: Eviews, Spss, Excel

**ECM 604 (Environmental Economics)**

1	Department proposing the course	Economics
2	Course Title	Environmental Economics
3	L-T-P Structure	Periods (55 mts. Each)/week:5 (L-5+T-0+P-0) min.pds./sem.:65
4	Credits	5
5	Course Number	ECM 604
6	Status	Major Course
7	Status vis- a – vis other course (course number/ title)	NA
8	Overlap with any UG/PG course of another Dept./Centre	NA
9	Faculty who will teach the course	Dr. S. Kumar
10	Will the course require visiting faculty?	No
11	Course objectives including motivation and aims	To provide the basic inputs and concern over the nature and dimensions of environmental economics

S. No.	Cours e No.	Existing Contents	Revised	Justification
1.	ECM 604	<b>UNIT 1: BASIC CONCEPTS</b> An introduction to Environmental Economics, Environment an Economic Good, Interaction between Economics, Environment and Ecology, Environment as a public good and market failure.	<b>UNIT 1: THEORY AND CONCEPT</b> Nature and significance of environmental economics – definition and scope of environmental economics – basic theory – market system and the environment – welfare and environment – the economics of externalities	Introductory part has been added to give a logical start to the course.
2.	ECM 604	<b>UNIT 2: ENVIRONMENTAL DEGRADATION DUE TO ECONOMIC DEVELOPMENT</b> Impact of Agricultural development, Impact of industrial development, other impacts, Sustainable development.	<b>UNIT 2: ENVIRONMENT AND ECONOMICS</b> Environment – economy linkage – environment as a necessity and luxury – population and environment linkage – environmental use as an allocative problem – environment as a public good – valuation of environmental damages: land, water, air and forest.	It is required to establish link between Environment and Economics to give appropriate direction to the course. Thus, the unit has been revised.
3.	ECM	<b>UNIT 3: ENVIRONMENTAL</b>	<b>UNIT 3: ENVIRONMENTAL</b>	Unit has been

	604	<b>PROBLEMS IN INDIA</b> Environmental pollution, Air pollution, Water pollution, Forests and Environmental quality, Land use, Urbanization and its impact on environmental quality.	<b>ISSUES, DEVELOPMENT DYNAMICS AND ASSESSMENT</b> Economic development and environmental problems – air pollution – water pollution – sound pollution – energy use and environment problem – pollution and urbanization – global warming and green house effect – health, urbanization, transport and technology – environmental degradation, Environmental Accounting	elaborated. The Environmental Accounting has been added.
4.	ECM 604	<b>UNIT 4: ENVIRONMENTAL REGULATION IN INDIA</b> Evolution of environmental policy, Air and Water Acts; Pollution Control Board and its function.	<b>UNIT 4: POLICY MEASURES</b> Basic approach – design of environmental policy – Indian environment policies and performance – pollution control boards and their function.	Unit has been revised to give policies.
5.	ECM 604	<b>UNIT 5: INTERNATIONAL ENVIRONMENTAL ISSUES</b> Causes and consequences of ozone depletion and climate change, Rio conference (Agenda 21); Protocols relating to climate change; Trade and environment in the WTO regime.	<b>UNIT 5: INTERNATIONAL ENVIRONMENTAL ISSUES:</b> Trans-boundary environmental problems; Economics of climate change; Trade and Environment, WTO and environment and EU policies and environment, United Nations Climate Change Conference	The contents have been modified.
Note: Reading list has been revised				

#### **ECM 606 (Economics of Health and Education)**

1	Department proposing the course	Economics
2	Course Title	Economics of Health and Education
3	L-T-P Structure	Periods (55 mts. Each)/week:5 (L-5+T-0+P-0) min.pds./sem.:65
4	Credits	5
5	Course Number	ECM 606
6	Status	Major Course (Optional)
7	Status vis- a – vis other course (course number/ title)	NA
8	Overlap with any UG/PG course of another Dept./Centre	NA
9	Faculty who will teach the course	
10	Will the course require visiting faculty?	Yes
11	Course objectives including motivation and aims	To give contemporary evidence based education and health practices undertaken by government

**Course Number: ECM606, Course Title: ECONOMICS OF HEALTH AND EDUCATION**

Class: BA(SS) Honours, Status of Course: MAJOR COURSE, Approved since session: .....

Total Credits:5, Periods(55 mts. each)/week:5(L-5+T-0+P/S-0), Min.pds./sem.:65

### **UNIT 1: ROLE OF HEALTH AND EDUCATION IN HUMAN DEVELOPMENT**

Importance in poverty alleviation; health and education outcomes and their relationship with macroeconomic performance.

### **UNIT 2: MICROECONOMIC FOUNDATIONS OF HEALTH ECONOMICS**

Demand for health; uncertainty and health insurance market; alternative insurance mechanisms; market failure and rationale for public intervention; equity and inequality.

### **UNIT 3: EVALUATION OF HEALTH PROGRAMS**

Costing, cost effectiveness and cost-benefit analysis; burden of disease.

### **UNIT 4: EDUCATION: INVESTMENT IN HUMAN CAPITAL**

Rate of return to education: private and social; quality of education; signaling or human capital; theories of discrimination; gender and caste discrimination in India.

### **UNIT 5: HEALTH AND EDUCATION SECTOR IN INDIA: AN OVERVIEW**

Health outcomes; health systems; health financing, Literacy rates, school participation, school quality measures

### **SUGGESTED READINGS:**

William, Jack, *Principles of Health Economics for Developing Countries*, World Bank Institute Development Studies, 1999.

World Development Report, *Investing in Health*, The World Bank, 1993.

Ronald G., Ehrenberg and Robert S., Smith, *Modern Labor Economics: Theory and Public Policy*, Addison Wesley, 2005.

### **Course Number: ECM501, Course Title: MICROECONOMIC ANALYSIS**

Class: BA(SS) Honours, Status of Course: MAJOR COURSE, Approved since session: .....

Total Credits:5, Periods(55 mts. each)/week:5(L-5+T-0+P/S-0), Min.pds./sem.:65

### **UNIT 1: MARKET STRUCTURE AND EQUILIBRIUM**

Preference; utility; budget constraint; choice; demand; Slutsky equation; buying and selling; choice under risk and inter temporal choice; revealed preference

Market forms – perfect and imperfect forms – the concept of normal profit – monopoly profit- equilibrium of a firm under perfect competition, monopoly, monopolistic competition, duopoly and oligopoly – price discrimination and measure of monopoly power – control and regulation of monopoly – collusive price leadership – kinked demand curve-taxation and equilibrium of a firm- Different Pricing Strategies: Capturing consumer surplus; peak-load pricing; quality discrimination, dumping in international market.

### **UNIT 2: PRICING METHODS**

Mark up pricing – break even pricing – rate of return pricing – variable cost pricing – peak load pricing – going rate pricing – controlled or administered pricing – minimum support price.

### **UNIT 3: FACTOR PRICING**

Market for the factors of production – marginal productivity theory of pricing of factor (distribution theory) – Euler's theorem-linkages among the factors of production – theories of wages – determination – wages and collective bargaining – wage differentials – rent – Ricardian and modern theories of rent – scarcity rent – differential rent and quasi rent – interest – classical and Keynesian theories – profit – innovation, risk and uncertainty theories

### **UNIT 4: FACTOR MARKET**

Payback period – average annual rate of return, net present value, internal rate of return, price changes, risk and uncertainty – elements of social cost benefit analysis.

### **UNIT 5: WELFARE ECONOMICS**

What is welfare economics – economic and welfare problems in measuring welfare – classical welfare economics – Pigovian welfare condition – Pareto’s criteria – value judgment – concept of a social welfare function-compensation principle –the Kaldor- Hicks criterion.

### **SUGGESTED READINGS**

Varian H.R: Intermediate Microeconomics: A Modern Approach, East West Press  
Pindyck, Rubinfeld and Mehta: Microeconomics, Pearson Education Asia  
Baumol, W. J.: Economic Theory and Operation Analysis, Prentice Hall, India  
Sen, A.: Microeconomics – Theory and Applications, OUP  
A. Koutsoyannis: Microeconomics A Modern Approach, East West Press, New Delhi

### **Course Number: ECM502, Course Title: INDIAN ECONOMIC DEVELOPMENT II**

Class: BA/BA(SS), Status of Course: MAJOR COURSE, Approved since session: .....  
Total Credits:5, Periods(55 mts. each)/week:5(L-5+T-0+P/S-0), Min.pds./sem.:65

### **UNIT 1 STRUCTURE OF THE INDIAN ECONOMY**

Organising an Economy; Evolution of the Indian Economy – planned and mixed economy; Role of State in Indian Economy; Sectors of Indian Economy; Uniqueness of the Indian Economy; The structural change of Indian economy since independence– sectoral aspects of Indian Economy

### **UNIT 2 INDIA’S NATIONAL INCOME**

Trend and pattern of India’s per capita income and GNP since 1991; Changing contribution of different sectors in NI; Social Security Measures given in recent times by GOI

### **UNIT-3 POVERTY AND INEQUALITY**

Poverty - The concept and measurement of poverty, Causes of poverty and Remedies; Unemployment - concept and measurement of unemployment, Causes of unemployment and Remedies  
Economic Inequality - Concept and measurement of Economic Inequality, Causes of Economic Inequality and Remedies, State inequality,

### **UNIT 4 ECONOMIC REFORMS IN INDIA**

Need and objectives of reforms in India, Economic Reforms – Liberalisation, Privatisation, Globalisation, Financial, Fiscal and Monetary Reforms, Major developments in Indian economy in the post reform period

### **UNIT 5 INDIA AND THE GLOBAL ECONOMY**

An Introduction, Global Economy Today, Euro zone Crisis, Changing Dynamics, India and BRICS; ASEAN, SAARC, Prospects for India, India’s External Sector –Composition of exports and imports, Major trading partners (US, EU, West Asia) and India’s contribution

### **SUGGESTED READINGS:**

Misra, S.K &Puri, V.K: Indian Economy, Himalaya Publishing House Pvt Ltd, 32nd edn, 2014  
Kapila, Uma: Indian Economy: Performance and Policies, 2013, Academic Foundation  
Deepashree, Indian Economy: performance and Policies, Tata McGraw Hill, 2008  
Economic Survey 2014-15, Ministry of Finance, Govt. of India, New Delhi

### **Course Number: ECM503, Course Title: STATISTICAL METHODS FOR ECONOMICS II**

Class: BA(SS) Honours, Status of Course: MAJOR COURSE, Approved since session: .....  
Total Credits:5, Periods(55 mts. each)/week:5(L-5+T-0+P/S-0), Min.pds./sem.:65

### **UNIT 1: INTRODUCTION TO SAMPLING DISTRIBUTIONS**

Population versus sample, Methods of sampling, simple random sample, sampling distribution of sample mean for normal and non-normal populations, Chebyshev's inequality, law of large numbers, optimum size of sample, central limit theorem

#### **UNIT 2: INTRODUCTION TO STATISTICAL INFERENCE**

Properties of point estimator - unbiasedness, relative efficiency and consistency, Testing of Hypothesis - type I and type II errors, level of significance, power of a test, Use of z, chi-square, t and F statistics - large sample and small sample tests for mean, one tail and two tail tests for difference of means, Chi-square test for (i) goodness of fit and (ii) independence of two attributes, F-test for ratio of two variances, one-way analysis of variance, confidence intervals for mean and variance

#### **UNIT 3: SIMPLE REGRESSION AND CORRELATION**

Simple linear regression; method of least squares; linear and exponential trend; Product moment – covariance, correlation, rank correlation

#### **UNIT 4: TIME SERIES**

Definition and components of a time series; seasonal variations – measuring through -a) simple average method- and ratio to trend method – cyclical variations – measuring through residual method – trend and its measurement through a) method of moving averages and method of least squares (annual production, sales, profit. etc.) – fitting a second degree trend (population growth) – growth curves, logistic curve;

#### **UNIT 5: INDEX NUMBERS**

Definition of index number – types of index number – price index-quantity index –value index – simple index number – weighted index number – construction of index number – problems in construction – methods in construction – simple and weighted – Laspeyre's price index (cpi in india) – Paasche's price index – Fisher's ideal index – splicing of index number – deflating

#### **SUGGESTED READINGS**

Jay L. Devore, Probability and Statistics for Engineering and the Sciences, Cengage Learning, 2014  
William G. Cochran, "Sampling Techniques", John Wiley, 3rd edn, 2008  
Allen L. Webster, Applied Statistics for Business and Economics: An Essentials Version, III edn, Tata McGraw Hill, 2008  
Murray Spiegel, Schaum's OUTlines Statistics, 4th edition, Tata McGraw Hill, 2008  
Levin &Rubin : Statistics For Management , 7th edn, Pearson  
Spiegel and Schiller, Probability and Statistics, Schaum's OUTlines, 2nd edition, Tata McGraw Hill, 2008

#### **Course Number: ECM504, Course Title: HISTORY OF ECONOMIC THOUGHT**

Class: BA(SS) Honours, Status of Course: MAJOR COURSE, Approved since session: .....

Total Credits:5, Periods(55 mts. each)/week:5(L-5+T-0+P/S-0), Min.pds./sem.:65

#### **UNIT 1: EARLY PERIOD**

Nature and importance of history of economic thought – ancient economic thought – Aristotle, Plato. Mercantilism: Main Characteristics; Physiocracy; natural order; Primacy of agriculture, Social classes, tableau Economique, taxation.

#### **UNIT 2: CLASSICAL PERIOD**

Adam Smith: Views on division of labour, theory of value, capital accumulation, distribution, trade and economic development; David Ricardo: main contributions in brief; Thomas Robert Malthus: Theory of Population, and Gluts Theory, J.B. Say: Laws of Market; J. S. Mill: Restatement of the Classical Theory, K. Marx- theory of value; theory of capitalist competition.

#### **UNIT 3: THE MARXIAN CHALLENGE AND MARGINAL REVOLUTION**

Karl Marx - A Contribution to the Critique of Political Economy, William Stanley Jevons - The Theory of Political Economy, Alfred Marshall - Principles of Economics, Eugen von Bohm-Bawerk - The Positive Theory of Capital

#### **UNIT 4: KEYNESIAN IDEAS**

The aggregate economy, Liquidity preference theory and Liquidity trap; Marginal Efficiency of Capital and Marginal efficiency of investment, wage rigidities under employment equilibrium, role of fiscal Policy; deficit spending and public works, Multiplier Principle

#### **UNIT 5: INDIAN ECONOMIC THOUGHT**

Early economic ideas; Kautilya, Modern economic ideas, Naroji, Economic ideas of Gandhi; Village, Swadeshi, Place of machine and Labour, cottage industries, trusteeship, Dr. Babasaheb Ambedkar, Amartya Sen.

#### **SUGGESTED READINGS:**

B.N. Ghosh & R. Ghosh: Concise History of Economic Thought, Himalaya Pub. House, Ganguli, B.N.: Indian Economic Thought, A 19<sup>th</sup> Century Perspective, Tata McGraw Hill, New Delhi. Ekelund, R.B and Hebert, R.F.: A History of economic theory and method, McGraw-Hill. Grey, A. And A.E. Thomson: The Development of Economic Doctrine, 2<sup>nd</sup> Edition, Longman Group, London. Kautilya: The Athashastra Edited Rearranged Translated And Introduced By L. N. Rangaranjan, Penguin Books, New Delhi. Schumpeter, J.A.: History of Economic Analysis, Oxford University Press, New York. Seshadri, G.B.: Economic Doctrines, B.R. Publishing corporations, Delhi. Hajela, T.N.(2008), History of Economic Thought, Ane books Pvt.Ltd. Bhatia, H.L: History of Economic Thought, Vikas publishing house, New Delhi.

#### **Course Number: ECM601, Course Title: MACRO-ECONOMIC ANALYSIS & POLICY**

Class: BA(SS) Honours, Status of Course: MAJOR COURSE, Approved since session: .....  
Total Credits:5, Periods(55 mts. each)/week:5(L-5+T-0+P/S-0), Min.pds./sem.:65

#### **UNIT 1: CONSUMPTION AND INVESTMENT FUNCTION**

Consumption – absolute income hypothesis, relative income hypothesis, life cycle hypothesis, permanent income hypothesis – investment (business fixed investment, residential investment and inventory investment) – neo-classical theory of investment – accelerator theory of investment

#### **UNIT 2: THE CLOSED ECONOMY IN THE SHORT RUN**

The goods market and derivation of IS curve – real influences and Shift in IS schedule – the money market and derivation of LM curve – the shift in LM curve – determination of equilibrium income and interest rates – the relative efficacy of fiscal and monetary policy.

#### **UNIT 3: THE AGGREGATE DEMAND AND SUPPLY**

The derivation of aggregate demand and supply curves – the Keynesian aggregate demand with vertical aggregate supply curve – sources of wage rigidity and unemployment – the flexible price with fixed money wage model – labour supply and money wage – the shift in aggregate supply – Keynes vs. Classics.

#### **UNIT 4: INFLATION AND UNEMPLOYMENT**

Inflation: concepts and consequences- The Phillips curve – the natural rate of unemployment – factors affecting natural rate of unemployment – the adaptive expectation and long-run Phillips curve – the concept of rational expectations – policy ineffectiveness debate.

#### **UNIT 5: OPEN ECONOMY MODELS**

The Mundell – Fleming model: determining equilibrium output in a small open economy; the monetary and fiscal policy under flexible and fixed exchange rate regimes; the Mundell- Fleming model with changing price level.

#### **SUGGESTED READINGS:**

R T Froyen (2008), Macroeconomics, Theory and policies, Prentice Hall  
N. Gregory Mankiw (2002) Macroeconomics, 5th or latest edition, Worth Publishers  
Rudiger Dornbusch, Stanley Fischer and Richard Startz,(2007) Macroeconomics, 6<sup>th</sup> or latest edition, McGraw Hill.  
Shapiro, E.: Macro-Economic Analysis, Galgotia Publication, New Delhi  
William Branson: Macro Economic Theory and Policy, Harper & Row

#### **Course Number: ECM602, Course Title: INDUSTRIAL ECONOMICS**

Class: BA(SS) Honours, Status of Course: MAJOR COURSE, Approved since session: 2006-07  
Total Credits:5, Periods(50 mts. each)/week:5(L-5+T-0+P/S-0), Min.pds./sem.:65

#### **UNIT 1: INDUSTRIAL ORGANISATION & OWNERSHIP STRUCTURE:**

[13 pds]



Public, Private, Joint & Cooperative Sectors; Private Corporate sector; MNC's and their role; corporate governance.

**UNIT 2: MARKET PERFORMANCE:** [13 pds]

The firm & its objectives; constraints on growth; Market concentration and its measurement. MRTP Act & Competition Act; Consumer Protection Act, Patent Act

**UNIT 3: PROJECT APPRAISAL:** [13 pds]

Capital Budgeting- Net Present Value (NPV) & Internal Rate of Return (IRR) criteria. Pay-Back period, Cost of capital.

**UNIT 4: FINANCIAL MODES OF INDUSTRY** [13 pds]

Mode of Financing: Equity & Debt; Institutional finance, Bank Finance.

**UNIT 5: INDIAN INDUSTRY IN THE INTERNATIONAL CONTEXT:** [13 pds]

Globalisation & Indian industry, International Competitiveness of Indian industries; Privatisation & issues relating to disinvestment policy, Social Responsibility of Business.

**SUGGESTED READINGS:**

SB Gupta: MANAGEMENT ACCOUNTING

SC Gupta: MANAGEMENT ACCOUNTING

J Herendeen: THE ECONOMICS OF CORPORATE ECONOMY

MY Khan: INDIAN FINANCIAL SYSTEMS

R Barthwal: INDUSTRIAL ECONOMICS

SC Kuchchal: INDUSTRIAL ECONOMICS

Turnvey: THEORY OF PUBLIC ENTERPRISES

**Course Number: ECM603, Course Title: BASIC ECONOMETRICS**

Class: BA(SS) Honours, Status of Course: MAJOR COURSE, Approved since session: .....

Total Credits:5, Periods(55 mts. each)/week:5(L-5+T-0+P/S-0), Min.pds./sem.:65

**UNIT 1: NATURE AND SCOPE OF ECONOMETRICS & REVIEW OF STATISTICS**

Meaning and Methodology of Econometrics, Descriptive Statistics- a. univariate case b. bivariate case, Random Variables and Probability distributions, Estimation of Parameters; Hypothesis Testing

**UNIT 2: SIMPLE LINEAR REGRESSION MODEL**

Specifications of the Model – Assumptions – Deriving the Ordinary Least Squares (OLS) Estimates – Gauss Markov Theorem – Estimation of the Error Variance – Statistical Inference in the Linear Regression Model – Confidence Intervals for the Estimated Parameters and the Testing of Hypotheses – Coefficient of Determination – Prediction with the Simple Regression model

**UNIT 3: CLASSICAL MULTIPLE LINEAR REGRESSION MODEL**

Least squares estimation;  $R^2$  and adjusted  $R^2$ ; Partial correlations, Classical Model: Gauss Markov Theorem; Standard errors of estimate; Standard errors of regression coefficients, Tests of hypotheses: Single parameters; Sets of parameters, Forecasting

**UNIT 4: VIOLATIONS OF CLASSICAL ASSUMPTIONS**

MULTICOLLINEARITY, HETEROSCEDASTICITY, AUTOCORRELATION

**UNIT 5: DISTRIBUTED LAG MODEL AND DUMMY VARIABLE**

Application of Distributed Lag Model and Autocorrected Error Models in short run demand analysis, Koyck Model, Nerlove model.

**SUGGESTED READINGS:**

D. N. Gujarati (2003): "Essentials of Econometrics", 3rd Edition, McGraw Hill.

C. Dougherty (2007): "Introduction to Econometrics", 3rd Edition, Oxford University Press.

RamuRamanathan (2002): "Introductory Econometrics with Applications", 5th Edition, South-Western

Koutsoyiannis A: Theory of Econometrics E L B S/ Macmillan

Jay L. Devore, Probability and Statistics for Engineering and the Sciences, Cengage Learning, 2014

Software Packages: Eviews, Spss, Excel

**Course Number: ECM604, Course Title: ENVIRONMENTAL ECONOMICS**

Class: BA(SS) Honours, Status of Course: MAJOR COURSE, Approved since session: .....

Total Credits:5, Periods(55 mts. each)/week:5(L-5+T-0+P/S-0), Min.pds./sem.:65

**UNIT 1: THEORY AND CONCEPT**

Nature and significance of environmental economics – definition and scope of environmental economics – basic theory – market system and the environment – welfare and environment – the economics of externalities

## **UNIT 2: ENVIRONMENT AND ECONOMICS**

Environment – economy linkage – environment as a necessity and luxury – population and environment linkage – environmental use as an allocative problem – environment as a public good – valuation of environmental damages: land, water, air and forest.

## **UNIT 3: ENVIRONMENTAL ISSUES, DEVELOPMENT DYNAMICS AND ASSESSMENT**

Economic development and environmental problems – air pollution – water pollution – sound pollution – energy use and environment problem – pollution and urbanization – global warming and green house effect – health, urbanization, transport and technology – environmental degradation, Environmental Accounting

## **UNIT 4: POLICY MEASURES**

Basic approach – design of environmental policy – Indian environment policies and performance – pollution control boards and their function.

## **UNIT 5: INTERNATIONAL ENVIRONMENTAL ISSUES:**

Trans-boundary environmental problems; Economics of climate change; Trade and Environment, WTO and environment and EU policies and environment, United Nations Climate Change Conference

### **SUGGESTED READINGS**

M. Karpagam, *Environmental Economics*, latest edition, Sterling Publishers, New Delhi.  
Bhattacharya, Rabindra N., "Environmental Economics-An Indian Perspective", latest edition, Oxford University Press, New Delhi  
Boumal, W.J. and W.E. Oates, "The Theory of Environmental Policy", latest edition, Cambridge University Press, UK  
Hanley, N.J.F. Shogren and B. White, "Environmental Economics in Theory and Practice", latest edition OUP, Delhi.  
Kolstad, Charles D., "Environmental Economics", latest edition, Oxford University Press, New York  
Tietenberg, T., *Environment and Natural Resource Economics*, latest edition, Pearson Education Inc. New Delhi.

## **Course Number: ECM606, Course Title: ECONOMICS OF HEALTH AND EDUCATION**

Class: BA(SS) Honours, Status of Course: MAJOR COURSE, Approved since session: .....

Total Credits:5, Periods(55 mts. each)/week:5(L-5+T-0+P/S-0), Min.pds./sem.:65

## **UNIT 1: ROLE OF HEALTH AND EDUCATION IN HUMAN DEVELOPMENT**

Importance in poverty alleviation; health and education outcomes and their relationship with macroeconomic performance.

## **UNIT 2: MICROECONOMIC FOUNDATIONS OF HEALTH ECONOMICS**

Demand for health; uncertainty and health insurance market; alternative insurance mechanisms; market failure and rationale for public intervention; equity and inequality.

## **UNIT 3: EVALUATION OF HEALTH PROGRAMS**

Costing, cost effectiveness and cost-benefit analysis; burden of disease.

## **UNIT4: EDUCATION: INVESTMENT IN HUMAN CAPITAL**

Rate of return to education: private and social; quality of education; signaling or human capital; theories of discrimination; gender and caste discrimination in India.

## **UNIT 5: HEALTH AND EDUCATION SECTOR IN INDIA: AN OVERVIEW**

Health outcomes; health systems; health financing, Literacy rates, school participation, school quality measures

### **SUGGESTED READINGS:**

William, Jack, *Principles of Health Economics for Developing Countries*, World Bank Institute Development Studies, 1999.  
World Development Report, *Investing in Health*, The World Bank, 1993.  
Ronald G., Ehrenberg and Robert S., Smith, *Modern Labor Economics: Theory and Public Policy*, Addison Wesley, 2005.

