PRESIDENCY UNIVERSITY

Department of Economics

SYLLABUS

B.Sc.
Major in Economics

&

B.A./B.Sc.
Elective Extra Departmental
Courses in Economics

PRESIDENCY UNIVERSITY
Course Structure
B.Sc. Economics Major/Honours
Total Marks 1000

The objective of B.Sc. Economics Major/Honours Programme at Presidency University is to provide students with a thorough grounding in the analytical methods of economics and to develop their skills in applying these methods to a diverse range of problems, both microeconomic and macroeconomic, in analysing and constructing complex arguments and in communicating these effectively. The courses in Statistics, Econometrics and Mathematical Economics will enable students build a particularly strong quantitative background, which is becoming more and more important for a successful career in economics.

Semester I
Paper I: Microeconomics I
Paper II: Mathematical Economics I

Semester II
Paper III: Macroeconomics I
Paper IV: Statistics I

Semester III
Paper V: Microeconomics II
Paper VI: Macroeconomics II
Paper VII: Mathematical Economics II

Semester IV
Paper VIII: Microeconomics III
Paper IX: Macroeconomics III
Paper X: Statistics II

Semester V
Paper XI: International Economics
Paper XII: Development Economics I
Paper XIII: Indian Economy in Pre-independence Period
Paper XIV: Introduction to Econometrics
Paper XV: Computer Applications

Semester VI
Paper XVI: Public Economics
Paper XVII: Development Economics II
Paper XVIII: Indian Economy in Post Independence Period
Paper XIX: International Economic Order
Paper XX: Project \ Term Paper

PRESIDENCY UNIVERSITY
B.A./B.Sc. Elective Economics Extra Departmental Courses

Two Elective Extra Departmental Courses in Economics will be offered:

Course A: Total Marks 300

      Paper I: Microeconomics I
      Paper II: Macroeconomics I
      Paper III: Microeconomics II
      Paper IV: Macroeconomics II
      Paper V: Indian Economic Problems
      Paper VI: Development Economics

Course B: Total Marks 100

      Paper I: Principles of Economics
      Paper II: Indian Economic Problems

Students will be allowed to opt for *any one* of these courses.

PRESIDENCY UNIVERSITY
DETAILED SYLLABUS
B.Sc. Economics Major/Honours

[Figures in extreme right indicate the number of contact hours]

FIRST SEMESTER

PAPER I	MICROECONOMICS I	Full Marks: 50

Module 1	**Introduction to Price Theory**	**18**
Unit 1	The scope of microeconomics.	07
	Scarcity and choice - production possibility curve – trade off , opportunity cost and decision making; incentives and information – prices (absolute and relative prices) property rights and profits.	
	Decision takers- households, firms and central authorities; choice by command and choice by market.	
	Alternatives to the price system – Rationing by Queues, Rationing by Lotteries, Rationing by Coupons.	
Unit 2	Elementary concepts of market demand and market supply curves.	08
	Market equilibrium - Existence, Uniqueness and Stability of equilibrium (the Walrasian approach and Marshallian approach).	
	Government Interventions and their Effects on market equilibrium – price ceiling, price floor and commodity taxation.	
	Black market	
	<u>Applications</u>: Rent Control Laws, Minimum Wage Legislation.	
Unit 3	Determinants of market demand and market supply – comparative statics.	03

Suggested readings: Lipsey and Chrystal: An Introduction to Positive Economics, OUP
Stiglitz and Walsh: Economics, W.W. Norton & Company
Mankiw: Principles of Economics, Thomson
Stockman: Introduction to Economics, The Dryden Press

Module 2	**Theory of Consumer Behaviour – Alternative Approaches**	**26**
Unit 1	Cardinal utility; law of diminishing marginal utility; derivation of the Marshallian demand curve and its elasticity implications.	03
Unit 2	Ordinal utility – axioms; indifference curves, budget constraint and consumer's equilibrium; comparative static: price – consumption curve, income-consumption curve and Engel's curve; demand elasticities and classification of commodities: normal, inferior and Giffen goods; substitution and income-effects and law of demand; compensating and equivalent variation, and consumer surplus.	18
	<u>Applications</u>: Labour Supply, Intertemporal Choice.	
Unit 3	Revealed Preference approach: Strong and weak axioms of revealed preference – properties of demand function.	05
	<u>Application</u>: Indexing Social Security Payments	

Suggested readings: Varian H.R: Intermediate Microeconomics: A Modern
Approach, East–West Press

Green: Consumer Theory, The Macmillan Press Ltd.
Friedman: Price Theory, Aldine Transaction
Gravelle and Rees: Microeconomics, Pearson
Breit and Hochman (ed.): Readings in Microeconomics, Holt, Reinehart & Winston, Inc.

Module 3	**Theory of Production and Costs**	**20**
Unit 1	Technology and technological efficiency – general concept of production function – concepts of total product, average product and marginal product –return to factor and returns to scale - isoquants and diminishing rate of factor substitution – elasticity of substitution –some examples of technology (fixed proportion, perfect substitute, Cobb – Douglas Production Function, CES Production Function), General concept of homogenous and homothetic production function and their properties.	10
Unit 2	Economic / Opportunity cost and accounting cost, concept of sunk cost; time dimension of cost – cost in the short run – total cost – fixed and variable cost – marginal cost – average cost – derivation of short run cost - long run cost function - functional coefficient and shape of long run average cost.— relation between short run and long run cost; expansion path; relation between expansion path and long run total cost curve.	10
Unit 3	Producer's equilibrium Application: Multi-product firm and economies of scope	

Suggested readings: Varian H.R: Intermediate Microeconomics: A Modern Approach, East–West Press
Varian H.R: Microeconomic Analysis, W.W. Norton
Gould and Ferguson: Microeconomic Theory, Richard D. Irwin, Inc.
Pindyck, Rubinfeld and Mehta: Microeconomics, Pearson Education Asia
Maddala and Miller: Microeconomics- Theory and Applications, McGraw Hill.

PAPER II	**MATHEMATICAL ECONOMICS I**	**Full Marks: 50**

Module 1	**Sets, Functions, and Linear Algebra**	**29**
Unit 1	Sets of n-tuples, Cartesian product, convex combination, sequences, Mapping, Real-valued-functions-continuity, differentiability, convexity, concavity, quasi-convexity, quasi-concavity of functions, homogeneous & Homothetic functions, Metric Space, Open & Closed, Compact, Convex sets, Level curves, Theorems on image and inverse image under continuous function, infimum, supremum, Weiestrass Theorem, uniqueness of maximum and minimum. Differentiation and Integration, Polynomials, powers and exponential, logarithmic functions, Mean-value-theorem, Taylor's series, L' Hôpital's rule.	22
Unit 2	Vector and matrices, determinants and matrix inversion, linear independence, the rank of a matrix, System of linear equations in matrix form, Cramer's rule, Implicit function Theorem and Comparative Static exercises.	07

Suggested readings: Chiang & Wainwright, Fundamental Methods of

Mathematical economics, McGraw Hill.
Sydsaeter & Hammond, Mathematics for Economic
Analysis, Pearson Education.
Simon & Blume, Mathematics for Economists, Viva
Books.
Silberberg & Suen, The Structure of Economics,
McGraw Hill.

Module 2	**Optimization & Comparative Statics**	**35**
Unit 1	Classical Optimization, envelope results	20
Unit 2	Non-linear Programming	07
Unit 3	Linear Programming	08

Suggested readings: Chiang & Wainwright, Fundamental Methods of
Mathematical economics, McGraw Hill.
Sydsaeter & Hammond, Mathematics for Economic
Analysis, Pearson Education.
Simon & Blume, Mathematics for Economists, Viva
Books.
Silberberg & Suen, The Structure of Economics,
McGraw Hill.

SECOND SEMESTER

PAPER III	**MACROECONOMICS I**	**Full Marks: 50**

Module 1	**Introduction to Macroeconomics**	**04**
Unit 1	Introduction to macroeconomic variables	02
Unit 2	Microeconomic and macroeconomic approaches	02

Suggested readings: Samuelson and Nordhaus, Economics, McGraw Hill
Mankiw, Economics : Principles and Applications, Cengage
Learning

Module 2	**National Income Accounting**	**15**
Unit 1	GDP, GNP, NDP, NNP and NI	04
Unit 2	Circular flow of income	01
Unit 3	Measurement of National Income – problems encountered	06
Unit 4	CPI, WPI and GDP deflator	02
Unit 5	National income as a measure of welfare	02

Suggested readings: Mankiw, Macroeconomics, Worth Publishers
Dornbusch and Fischer, Macroeconomics, McGraw-Hill

Module 3	**Determination of Income – Simple Keynesian Model**	**15**
Unit 1	Keynesian consumption function	03
Unit 2	Equilibrium in the commodity market	02
Unit 3	Stability of equilibrium	02
Unit 4	Multiplier	06
Unit 5	Paradox of thrift	02

Suggested readings: Dornbusch and Fischer, Macroeconomics, McGraw-Hill
Froyen, Macroeconomics : Theory and Policy, Pearson Education
Mankiw, Macroeconomics, Worth Publishers

Module 4	**Determination of Income and Interest Rate – IS-LM Model**	**18**
Unit 1	Commodity market equilibrium and IS curve	02
Unit 2	Money market equilibrium and LM curve	04
Unit 3	Simultaneous equilibrium in commodity and money markets – determination of income and interest rate	01
Unit 4	Stability of equilibrium – phase diagram	01
Unit 5	Comparative Statics - Monetary policies and fiscal policies	08
Unit 6	Model with real balance effect	02

Suggested readings: Dornbusch and Fischer, Macroeconomics, McGraw-Hill
Froyen, Macroeconomics : Theory and Policy, Pearson Education

Module 5	**Consumption Function**	**12**
Unit 1	Keynesian consumption function	01
Unit 2	Empirical findings on consumption-income relationship	01
Unit 3	Theory of inter temporal choice	04
Unit 4	Permanent income hypothesis	03
Unit 5	Life cycle hypothesis	03

Suggested readings: Mankiw, Macroeconomics, Worth Publishers
Froyen, Macroeconomics : Theory and Policy, Pearson Education

PAPER IV	**STATISTICS I**	**Full Marks: 50**

Module 1	**Data Presentation**	**04**
Unit 1	Collection of Data- Variable and Attribute - Population and Sample. Classification and presentation of data.	02
Unit 2	Frequency distribution and its diagrammatic representation.	02

Suggested readings: Goon, Gupta, Dasgupta: Fundamentals of Statistics,

Vol I, World Press Private Limited
Nagar and Das: Basic Statistics, OUP
Bowen & Starr, Basic Statistics for Business and
Economics, McGraw Hill.

Module 2   Measures of Central Tendency   **15**
Arithmetic Mean, Median and Mode for grouped and ungrouped data, Comparison
of Mean, Median and Mode, Geometric and Harmonic Mean, Composite Mean.
Application: Index Numbers: Index number as weighted averages, Price and quantity
index numbers, Problems in the Construction of Index Numbers, Tests for index
Numbers, Chain based Index, Cost of Living Index Number, Wholesale Price Index
and Cost of Living Index in India, Uses of Index Numbers, Index numbers as indices
of well-being, Stock market indices.

Suggested readings: Goon, Gupta, Dasgupta: Fundamentals of Statistics,
                Vol I, World Press Private Limited
                Nagar and Das: Basic Statistics, OUP
                Bowen & Starr, Basic Statistics for Business and
                Economics, McGraw Hill.

Module 3   Measures of Dispersion   **12**
Range, Mean Deviation, Quartile Deviation and Standard Deviation, Measures of
Relative Dispersion, Curve of Concentration
Application: Measurement of Economic Inequality: Gini Coefficient and Lorenz
Curve.

Suggested readings: Goon, Gupta, Dasgupta: Fundamentals of Statistics,
                Vol I, World Press Private Limited
                Nagar and Das: Basic Statistics, OUP
                Debraj Ray: Development Economics, OUP
                Bowen & Starr, Basic Statistics for Business and
                Economics, McGraw Hill.

Module 4   Moments, Skewness, Kurtosis   **08**
Central and non central moments, different measures of skewness and kurtosis

Suggested readings: Goon, Gupta, Dasgupta: Fundamentals of Statistics,
                Vol I, World Press Private Limited
                Nagar and Das: Basic Statistics, OUP
                Bowen & Starr, Basic Statistics for Business and
                Economics, McGraw Hill.

Module 5   Population Statistics   **05**
  Unit 1   Measurements of mortality: Crude Death Rate, Specific Death Rate, Standardised   02
             Death Rate, Mortality Index, Infant Mortality Rate.
  Unit 2   Measurements of Fertility: Crude Birth Rate, General Fertility Rate, Age-specific   02
             Fertility Rate, Total Fertility Rate, Gross Reproduction Rate, Net Reproduction Rate.
  Unit 3   Life Table: its uses.

                                                                                 01
Suggested readings: Goon, Gupta, Dasgupta: Basic Statistics, World Press
                Private Limited

Nagar and Das: Basic Statistics, OUP

Module 6	**Probability Theory**	**20**
Unit 1	Elements of Probability Theory: Sample Space, Probability Space, Events, Classical Definition of Probability	07
Unit 2	The Addition Rule, The Multiplication Rule, Theorems of Total Probability, Conditional Probability and Statistical Independence	07
Unit 3	Limitations of the Classical definition, Frequency definition, Axiomatic Approach, Bayes' Rule	06

Suggested readings: Hoel, Paul, G.: Introduction to Mathematical Statistics, Wiley Series in probability and statistics
Paul G. Hoel, Sidney C. Port, Charles J. Stone: Introduction to Probability Theory, Universal Book Store, Delhi
Goon, Gupta, Dasgupta: Fundamentals of Statistics, Vol I, World Press Private Limited

THIRD SEMESTER

PAPER V	MICROECONOMICS II	Full Marks: 50

Module 1	**Organization and Management of the Firm**	**04**

Defining a firm – firm's legal form.
Profit maximization hypothesis – shareholder goals, managerial goals, capital market control and notion of takeover (with selected examples of takeovers in India).
Contractual theories and organizational theories of firm (concepts only).

Suggested readings: Baumol, W. J.: Economic Theory and Operation Analysis, Prentice Hall, India
Sen, A.: Microeconomics – Theory and Applications, OUP

Module 2	**Perfect Competition**	**12**

Assumptions - economic vs. accounting profit; short-run profit maximization – short-run supply curve of the firm and the industry.
Output choice and competitive equilibrium in the long run – economic rent and profit; long-run industry supply curve under constant, increasing and decreasing costs.
Consumer's and producer's surplus – effects of tax and subsidy – deadweight losses.
Application: Free trade vs. protection.

Suggested readings: Varian H.R: Intermediate Microeconomics: A Modern Approach, East West Press
Pindyck, Rubinfeld and Mehta: Microeconomics, Pearson Education Asia
Maddala and Miller: Microeconomics- Theory and Applications, McGraw Hill
Perloff, Jeffrey M. (2007): Microeconomics - Theory and Application with Calculus, Addison Wesley

Module 3	**Imperfect Competition**	**30**
Unit 1	Monopoly:	12

Profit maximization of a single plant monopolist – effects of tax – the multiplant monopoly.

Measuring monopoly power - sources of monopoly power – social costs of monopoly power – rent seeking, price regulation and natural monopoly; limiting market power – antitrust laws.

Monopoly equilibrium under sales maximization - comparison between profit maximization and sales maximization.

Unit 2	Different Pricing Strategies:	08

Capturing consumer surplus; price discrimination – first, second and third degree price discrimination.

Applications: Iintertemporal price discrimination and peak-load pricing, two-part tariff (concept with examples), bundling (concept with examples), quality discrimination, dumping in international market.

Unit 3	Monopolistic Competition:	10

Assumptions – product differentiation and demand curve – concept of product group – equilibrium of the firm – excess capacity and its interpretation

Advertising and informational product differentiation

Suggested readings: Varian H.R: Intermediate Microeconomics: A Modern
Approach, East– West Press
Pindyck, Rubinfeld and Mehta: Microeconomics, Pearson
Education Asia
Maddala and Miller: Microeconomics- Theory and
Applications, McGraw Hill
Perloff, Jeffrey M. (2007): Microeconomics - Theory and
Application with Calculus, Addison Wesley
Cohen and Cyert, Theory of the Firm, Prentice Hall of India
Shy, Oz: Industrial Organization: Theory and Applications,
MIT Press.

Module 4	**Factor Market**	**20**
Unit 1	Labour demand and supply: competitive labour market – demand for labour when labour is the only variable input- demand for labour when several inputs are variable - Adding–up problem; monopsony; exploitation and role of trade union	12
Unit 2	Capital – demand for rented capital – the rental rate and the interest rate – nominal and real interest rate – market for bonds and market for stocks	04
Unit 3	Natural Resources – renewable and exhaustible resources - rent and quasi-rent for land	03
Unit 4	Entrepreneurship	01

Suggested readings: Varian H.R: Intermediate Microeconomics: A Modern
Approach, East West Press
Pindyck, Rubinfeld and Mehta: Microeconomics, Pearson
Education Asia
Gould and Ferguson: Microeconomic Theory, Richard D. Irwin
Perloff, Jeffrey M. (2007): Microeconomics - Theory and
Application with Calculus, Addison Wesley

PAPER VI   **MACROECONOMICS II**   **Full Marks: 50**

Module 1 **Classical Macroeconomics**   **16**
Unit 1 Say's law – saving and investment   02

Unit 2 Quantity theory of money   02

Unit 3 Labour market   02

Unit 4 Determination of income, employment, wage and interest rate   02

Unit 5 Dichotomy between real sector and monetary sector ; neutrality of money   02

Unit 6 Complete classical system and complete Keynesian system   06

      Suggested readings: Mankiw, Macroeconomics, Worth Publishers
            Dornbusch and Fischer, Macroeconomics, McGraw-Hill
            Ackley, Macroeconomics : Theory and Policy, Macmillan
            Publishing Company
            Surrey (ed), Macroeconomic Themes, Oxford University Press
            Mueller (ed), Readings in Macroeconomics, Holt, Rinehart and
            Winston, Inc.

Module 2 **Inflation and Unemployment**   **08**
Unit 1 Theory of inflation - Costs of inflation - Sources of inflation -   Remedies to   02
       inflation

Unit 2 Concepts of unemployment - Natural rate of unemployment -   Structural   02
       unemployment - Frictional unemployment - Cyclical unemployment - Involuntary and
       voluntary unemployment

Unit 3 Phillips Curve   04

      Suggested readings: Mankiw, Macroeconomics, Worth Publishers

Module 3 **AD-AS Model**   **10**
Unit 1 Derivation of the aggregate demand curve   01

Unit 2 Derivation of the aggregate supply curve from Phillips curve   01

Unit 3 Explanation of aggregate supply curve - Sticky price model - Sticky wage model -   06
       Imperfect information model - Worker misperception model

Unit 4 Determination of price and income   02

      Suggested readings: Mankiw, Macroeconomics, Worth Publishers

Module 4 **Investment**   **12**
Unit 1 Classification of investment - Business fixed investment -   Inventory   02
       investment - Residential investment

Unit 2 Theories of business fixed investment - Neoclassical theory -   Tobin's Q   06

Unit 3 Theory of inventory investment – acceleration principle   02

| Unit 4 | Theory of residential investment | 02 |

Suggested readings: Mankiw, Macroeconomics, Worth Publishers
Dornbusch and Fischer, Macroeconomics, McGraw-Hill
Ackley, Macroeconomics : Theory and Policy, Macmillan
Publishing Company

Module 5	**Supply of Money**	**10**
Unit 1	Definitions of money – M1, M2, M3 and M4	02
Unit 2	Money creation by commercial banks	02
Unit 3	Money multiplier	03
Unit 4	Control of money supply by the central bank	03

Suggested readings: Mankiw, Macroeconomics, Worth Publishers
Dornbusch and Fischer, Macroeconomics (3rd edition), McGraw-Hill
Sikdar, Macroeconomics, Oxford University Press

Module 6	**Demand for Money**	**08**
Unit 1	Keynesian theory of speculative demand for money	02
Unit 2	Tobin's theory of speculative demand for money	03
Unit 3	Baumol-Tobin model of transaction demand for money	03

Suggested readings: Mankiw, Macroeconomics, Worth Publishers
Dornbusch and Fischer, Macroeconomics (3rd edition), McGraw-Hill
Laidler, The Demand for Money:Theories and Practice,Allied
Publishers Private Ltd
Ackley, Macroeconomics : Theory and Policy, Macmillan
Publishing Company

PAPER V II	**MATHEMATICAL ECONOMICS II**	**Full Marks: 50**

Module 1	**Linear Algebra Revisited**	**10**
	Input-output analysis- Leontief static closed and open models.	

Suggested readings: Mukherjee and Pandit, Mathematical Methods for Economic
Analysis, Allied Publishers.

Module 2	**Dynamic Analysis**	**28**
Unit 1	Eigenvalues and Eigenvectors, Difference equations: First order equations, compound interest and present discounted values, linear equations with variable coefficients, second order equations with constant coefficients. Economic applications.	13
Unit 2	Differential equations: First order equations, separable differential equations,	15

qualitative theory and stability, second order differential equations with constant coefficients. . Economic applications.

Suggested readings: Chiang & Wainwright, Fundamental Methods of Mathematical economics, McGraw Hill.
Sydsaeter & Hammond, Mathematics for Economic Analysis, Pearson Education.
Simon & Blume, Mathematics for Economists, Viva Books.
Silberberg & Suen, The Structure of Economics, McGraw Hill.

Module 3	**Game Theory**	**26**
Unit 1	Defining a game structure: the basic concepts, categories of games (static & dynamic games, complete information-incomplete information games, perfect information-imperfect information games), normal-form and extensive-form presentation	04
Unit 2	Static games-2: Non-constant-sum games with unique pure strategy Nash equilibrium: Dominant strategy Nash equilibrium-Prisoners' Dilemma, rationalizable strategy- Cournot equilibrium.	05
Unit 3	Dynamic games-1: sequential-move games, backward induction outcome, SPNE.	06
Unit 4	Dynamic games-2: repeated games	03
Unit 5	Collective-action games	08

Suggested readings: Dixit, Skeath, Reiley, Games of Strategy, W. W. Norton
Aliprantis & Chakrabarti, Games and Decision Making, OUP
R.Gibbons, Game Theory for Applied Economists, Princeton University Press.

FOURTH SEMESTER

PAPER VIII	**MICROECONOMICS III**	**Full Marks: 50**

Module 1	**Strategic Interaction and Oligopoly**	**30**
Unit 1	Prisoner's dilemma and oligopolistic interdependence - concept of Nash equilibrium	02
Unit 2	Simultaneous Quantity Setting: Cournot Equilibrium; Simultaneous Price Setting: Bertrand Equilibrium and Bertrand Paradox, Product differentiation in Bertrand model.	08
Unit 3	Sequential game with perfect information - Quantity Leadership: Stackelberg Equilibrium.	04
Unit 4	Implications of the Prisoners' dilemma for oligopolistic pricing: Price Rigidity – Price Signaling and Price Leadership	06
Unit 5	Collusion and Formation of Cartel; Cartel Instability. Threats – Commitments - Credibility and Cartel Stability.	08
Unit 6	Entry Deterrence	02

Selected Readings: Aliprantis and Chakrabarti: Games and Decision Making, OUP
Pindyck, Rubinfeld and Mehta: Microeconomics, Pearson Education Asia.

Tirole, J.: The Theory of Industrial Organization, Pretice Hall
Gravelle and Rees: Micro Economics, Pearson Education
Sen, A.: Microeconomics – Theory and Applications, OUP

Module 2	**Uncertainty and Information**	**16**
Unit 1	Expected utility theorem and attitude towards risk - utility function and expected utility; risk preference and risk aversion; concept of risk premium and certainty equivalence. Applications: Risk spreading: Role of the stock market - demand for risky assets – measuring risk - trade off between risk and return. Reducing risk: demand for Insurance – fair premium, co-insurance, co-payments/ deductibles; Risk Pooling.	10
Unit 2	Markets with Asymmetric Information - quality uncertainty and the market for Lemons: adverse selection and moral hazard Applications: Some examples of adverse selection and moral hazard	06

Selected Readings: Varian H.R: Intermediate Microeconomics: A Modern Approach, East West Press
Pindyck, Rubinfeld and Mehta: Microeconomics, Pearson Education Asia
Perloff, Jeffrey M. (2007): Microeconomics - Theory and Application with Calculus, Addison Wesley
Kreps, D. M.: A Course in Micro Economic Theory, Prentice Hall of India

Module 3	**Economic Efficiency in a General Equilibrium Framework**	**18**
Unit 1	Pareto optimality and welfare, 2X2 Exchange: Pareto efficiency, Utility Possibility Frontier; 2X2 Production: Pareto efficiency, Production Possibility Frontier; Social Indifference Curve, Grand Utility Possibility Frontier; Competitive equilibrium and Pareto efficiency.	08
Unit 2	Externalities and market inefficiency – difference between social costs and private costs – positive and negative externalities – private solution to externalities - Coase Theorem; Public policy towards externalities – regulation, Pigovian tax and subsidies, tradable permits. Introducing common property resources and public goods.	10

Suggested readings: Gould and Ferguson: Microeconomic Theory, Richard D. Irwin
Perloff, Jeffrey M.: Microeconomics – Theory and Application with Calculus, Addison Wesley.
Jehle, G. and Reny, P.: Advanced Microeconomic Theory, Addison Wesley.
Mankiw and Taylor: Microeconomics, CENGAGE

Module 1	**Open Economy Macroeconomics**	**20**
Unit 1	Balance of Payment accounts	03
Unit 2	Determination of national income in an open economy	05
Unit 3	Mundell – Fleming model	06
Unit 4	Foreign exchange market	02
Unit 5	Effect of devaluation, tariff and export subsidy on output and trade balance	02
Unit 6	Internal and external balance and assignment problem with fiscal policy and exchange rate	02

Suggested readings: Krugman and Obstfeld, International Economics : Theory and Policy, Pearson Education
Dornbusch, Open Economy Macroeconomics, Basic Books, Inc. Publishers
Caves and Jones, International Economics : Theory and Policy, Pearson Education
Mankiw, Macroeconomics, Worth Publishers

Module 2	**Alternative Schools of Macroeconomics**	**14**
Unit 1	Rational Expectations Hypothesis	04
Unit 2	Real Business Cycle	06
Unit 3	Introduction to New Keynesian Economics	04

Suggested readings: Mankiw, Macroeconomics, Worth Publishers
Dornbusch, Fischer and Startz, Macroeconomics,
Froyen, Macroeconomics : Theory and Policy, Pearson Education

Module 3	**Theory of Growth**	**30**
Unit 1	Harrod model of growth and knife-edge instability	10
Unit 2	Neoclassical theory of growth	15
Unit 3	Introduction to endogenous growth	05

Suggested readings: Mankiw, Macroeconomics, Worth Publishers
Barro and Sala-i-Martin, Prentice Hall of India Private Ltd
Sen (ed), Growth Economics, Penguine Education

PAPER X   **STATISTICS II**   **Full Marks: 50**

Module 1	**Introducing Bivariate data**	**08**

Definition of bivariate data, scatter diagram, Covariance as a measure of association; Coefficient of Simple Correlation- Properties and the method of calculation; Rank correlation (Spearman's Rank Correlation); Difference between the correlation approach and the regression approach.

Suggested readings: Goon, Gupta, Dasgupta: Fundamentals of Statistics, Vol I,
World Press Private Limited

Nagar and Das: Basic Statistics, OUP

Bowen & Starr, Basic Statistics for Business and Economics,

McGraw Hill.

Module 2	**Random Variables and Probability Distributions**	**18**
Unit 1	Definition of random variable: discrete and continuous random variable, probability mass function and probability density functions, Expectation and Variance of random variables, Joint Probability Distribution: Concept of Independence, Marginal and Conditional Distribution. Expectation of the product of two variates.	06
Unit 2	Univariate Probability Distributions: Binomial, Poisson, Normal and Standard Normal Distribution –Recursive relations - Mean,Variance, Skewness and Kurtosis.	06
Unit 3	Moment Generating Functions, Limiting form of Binomial distribution (with proof), Limiting form of Poisson distribution (no proof), Importance of Normal Distribution in Statistics, Central Limit Theorem (statement only).	06

Suggested readings: Hoel, Paul, G.: Introduction to Mathematical Statistics, Wiley Series in probability and statistics

Paul G. Hoel, Sidney C. Port, Charles J. Stone: Introduction to Probability Theory, Universal Book Store, Delhi

Mathai and Rathie: Probability and Statistics, The Macmillan Company of India Limited

Goon, Gupta, Dasgupta: Fundamentals of Statistics, Vol I, World Press Private Limited

Nagar and Das: Basic Statistics, OUP

Bowen & Starr, Basic Statistics for Business and Economics, McGraw Hill.

Module 3	**Sampling Theory**	**10**
Unit 1	Population and Sample, Parameter and Statistic, Random Sampling: Methods of Drawing Random samples (with and without replacement). Basic Concepts of different methods of sampling –Stratified Sampling, clustered sampling, multi-stage sampling, purposive sampling	03
Unit 2	Sampling Distribution, Standard Error.	02
Unit 3	Sampling Distributions associated with Normal Population, Expectation and Standard Error of Sample Mean (with and without replacement)	02
Unit 4	Derived Distributions: Chi-Square Distribution, Student's t Distribution, F-Distribution (definition and important properties), Fisher's t distribution, concept of degrees of freedom.	03

Suggested readings: Cochran, W. G.: Sampling Techniques, 3rd ed. Willey Edition

Goon,Gupta,Dasgupta: Fundamentals of Statistics, Vol I, World Press Private Limited

Mood, A.M., F.A.Greybill and D.C. Boes: Introduction to the theory of statistics, McGraw Hill

Module 4	**Classical Statistical Inference**	**28**
Unit 1	Basic concepts of estimation: Desirable properties of estimators (Unbiasedness, Minimum Variance, Consistency and Sufficiency), Methods of Point Estimation - Maximum Likelihood Estimators and their properties, Maximum Likelihood estimation of the parameters of Binomial, Poisson and Normal Distributions.	14
Unit 2	Testing of Hypothesis: Confidence Intervals, p-values, Type-I and Type-II Errors, Simple applications of tests for the Mean and Variance of a Univariate Normal Population.	14

Suggested readings: Goon, Gupta & Dasgupta: Fundamentals of Statistics, Vol I, World Press Private Limited
Bowen & Starr, Basic Statistics for Business and Economics,
McGraw Hill.
Mood, A.M., F.A.Greybill and D.C. Boes: Introduction to the
theory of statistics, McGraw Hill

FIFTH SEMESTER

PAPER XIV	INTERNATIONAL ECONOMICS	Full Marks: 50

Module 1	**Basis for and Gains from trade**	**08**
Unit 1	Arbitrage and basis of trade; Comparative (price) advantage; different sources of Comparative Advantage; Absolute versus comparative Advantage	03
Unit 2	Gains from Trade: Trade as a positive-sum game - Gains from Trade theorem, illustration and its meaning; GFT theorem and Pareto optimality; Decomposition of GFT; substitution possibilities in production and consumption and magnitudes of GFT; Necessary and sufficient conditions of GFT: Tangency and convexity conditions	05

Suggested readings: Caves, Frankel, Jones, World Trades and Payments: (9th ed.) Pearson Education
Jagdish N. Bhagwati, Arvind Panagariya, and T. N. Srinivasan, (2nd ed.) Lectures on International Trade.

Module 2	**International Equilibrium**	**06**
Unit 1	Offer curve under increasing opportunity costs: Derivation and Elasticity; International Equilibrium and determination of terms of trade; Offer curve under constant opportunity cost and distribution of GFT between large and small countries	04

Suggested readings: Krugman, Paul R. and Obstfeld, Maurice. International Economics: (8th ed.) Pearson Education
Caves, Frankel, and Jones, World Trades and Payments: (9th Ed.) Pearson Education
Salvatore, Dominick. International Economics (8th Ed.), Wiley India.

Suggested readings: Krugman, Paul R. and Obstfeld, Maurice. International Economics: (8th Ed.) Pearson Education
Caves, Frankel, Jones, World Trades and Payments: (9th Ed.) Pearson Education
Salvatore, Dominick. International Economics (8th Ed.), Wiley India.
Gandolfo, G. International Trade Theory and Policy, Springer.

Suggested readings: Krugman, Paul R. and Obstfeld, Maurice. International Economics: (8th ed.) Pearson Education
Caves, Frankel, and Jones, World Trades and Payments: (9th Ed.) Pearson Education
Heller, H R., International Trade; Theory and Empirical Evidence, Prentice Hall.
Gandolfo, G. International Trade Theory and Policy, Springer.

interpretation: Specific Factor model as "short run" Heckscher-Ohlin model.

Unit 2	Relative price change and Income Distribution	01

Suggested readings: Krugman, Paul R. and Obstfeld, Maurice. International Economics: (8th ed.) Pearson Education.
Caves, Frankel, Jones, World Trades and Payments: (9th Ed.) Pearson Education.
Gandolfo, G. International Trade Theory and Policy, Springer.

Module 6	**Commercial Policy**	**16**
Unit 1	Partial equilibrium analysis of tariff; Tariff and Quota, Tariff-Quota equivalence (under perfect competition and monopoly), Effective Rate of Protection	04
Unit 2	General Equilibrium Analysis: Tariff in small and large country, Optimum Tariff, Metzler's Paradox	04
Unit 3	Tariff and income distribution; Wage gap debate; Tariff and alternative policy measures for special objectives, Infant industry argument for protection	04
Unit 4	Domestic distortion and policy interventions.	03
Unit 5	Other trade and non-trade barriers (Concepts only): VER; environmental regulations as non-tariff barriers.	01

Suggested readings: Krugman, Paul R. and Obstfeld, Maurice. International Economics: (8th Ee.) Pearson Education
Caves, Frankel and Jones, World Trades and Payments: (9th Ed.) Pearson Education
Salvatore, Dominick. International Economics: (8th Ed.), Wiley India.
Gandolfo, G. International Trade Theory and Policy, Springer.

Module 7	**Effect of Growth on Trade**	**06**
Unit 1	Factor growth and production possibility; Trade and Growth induced by technical progress	03
Unit 2	Growth, terms-of-trade and welfare	03

Suggested readings: Caves, Frankel, Jones, World Trades and Payments: (9th ed.) Pearson Education
Gandolfo, G. International Trade Theory and Policy, Springer.

PAPER XII	**DEVELOPMENT ECONOMICS I**	**Full Marks: 50**

Module 1	**Meaning of Economic Development**	**18**
Unit 1	The Income Approach: per capita income and distribution of income—the measurement issues.	02
Unit 2	The capability approach: development of the approach (preceding approaches like utility approach, minimum needs approach), entitlement and functionings,	10

standard of living as opposed to well-being and commitment. Attempts at and levels of aggregation (literacy rates, life-expectancy at birth, child mortality rates etc.; HDI, GDI).

Unit 3   International comparison using both approaches. Usefulness as well as problems   06
of Income Approach. The Income Mobility matrix, the six stylized facts a la Kuznets about structural shifts in output and employment , role of technology in enhancing the productivity of social labour.
A very brief introduction to the industrial revolution in Western Europe, spread of the industrial economy across the world in Asia, Africa and Latin America -- The Stages theories: Rostow and Marx.

Suggested readings: A.K Sen: The Standard of Living (Cambridge University Press)
Debraj Ray: Development Economics, (OUP)
Commodity and Capability: Amartya Sen (OUP)
A. K Sen: Poverty and Famine (OUP)
S.Fukuda-Parr and A.K.Shiva (eds): Readings in Human Development (OUP)
HDR 1995 and subsequent issues
S. Kuznets "Modern Economic Growth: Findings and Reflections": (Nobel Lecture, 1971)
W.W.Rostow: The Stages of Economic Growth (Cambridge University Press)
Y.S.Brenner: Theories of Economic Development and Growth: (George Allen & Unwin)
Irma Adelman: Theories of Economic Growth and Development: (Stanford University Press)
P.Deane: The First Industrial Revolution: (Cambridge University Press)
E.J.Hobsbawm: Industry and Empire: (Penguin)
Y.Hayami: Development Economics: (OUP)

Module 2   Alternative approaches to development   23
Unit 1   (i) Sectoral transformation - Lewis' model of growth with unlimited supply   15
of labour – Sen's model on condition of existence of surplus labour. Attendant problems- (i) Harris-Todaro model of rural-urban migration, (ii) terms of trade problem -- the Bukharin-Preobrazhensky debate
(ii) Trade and Development
Unit 2   Different worldviews: Modernism, ECLA and Dependency School.   08

Suggested readings: Debraj Ray: Development Economics (OUP)
K. Basu: Analytical Development Economics (OUP)
Y. Hayami: Development Economics (OUP)
Rune Skarstein: Development Theory (OUP)
P.W. Preston: Development Theory (Oxford-Blackwell)
H. Mynt: The Economics of the developing Countries (B.I. Publications)
AK Sen: Resources, Values and development (OUP)
Agarwala and Singh (eds.): The Economics of

Underdevelopment (OUP)
A.Brewer: Marxist Theories of Imperialism, (Routledge)
Alec Nove: An Economic History of the USSR (Allen Lane-Penguin)

Module 3	**The role of History and Expectations**	**13**
Unit 1	Concept of complementarity , multiple equilibria and coordination failure- role of the State and role of the Community. Balanced and Unbalanced Growth-- the role of the cotton textile industry in Britain during the industrial revolution. Critical linkages in economy wide transformations. (b) Increasing returns and the problem of market access.	08
Unit 2	The Theory of Induced Innovation and historical path dependency—barriers to Induced Innovation.	05

Suggested readings: D. Ray: Development Economics, (OUP)
Y. Hayami: Development Economics (OUP)
H. Mynt: The economics of the developing countries (B.I. Publications)
P. Deane: The First Industrial Revolution (Cambridge University Press)

Module 4	**Market and the State**	**10**
Unit 1	The historical perspective– The laissez faire then and globalization-cum-liberalization now	06
Unit 2	Market failure and Government failure, the problem of sustainable development	04

Suggested readings: P. Deane: The First Industrial Revolution (Cambridge University Press)
E.J. Hobsbawm: Industry and Empire (Penguin)
Y. Hayami: Development Economics (OUP)
B. Jalan: India's Economic Crisis (OUP)
Sunanda Sen: Globalization and Development (National Book Trust, India)
Stiglitz: Globalization and its Discontents (Penguin)
J. Stiglitz: Making Globalization Work (Allen Lane)
J.N. Bhagwati: In Defense of Globalization (OUP)
P. Dasgupta: Economics, a Short Introduction (OUP)
P. DSasgupta: Human Well-being and the Natural Environment (OUP)

PAPER XIII INDIAN ECONOMY IN PRE-INDEPENDENCE PERIOD Full Marks: 50

Module 1	**Introduction**	**08**
	Why the study of economic history is important-How the course of British economic development in historical perspective influenced the path of India's economic history-How the needs of world capitalism are fulfilled if some regions remain underdeveloped in the world	

Module 2	Impact of colonial rule on certain areas in the Indian economy	20
Unit 1	De-industrialization	06
Unit 2	Theory of economic drain and its impact on Indian economic development	10
Unit 3	Commercialization of Indian agriculture	04
Module 3	**Aspects of British Imperial Policy:**	**30**
Unit 1	Land policy from the Permanent settlement of Lord Cornwallis	04
Unit 2	Railways and Irrigation	06
Unit 3	Policy of Discriminating Tariff Protection	04
Unit 4	Early industrial development of India and the effects of the Managing Agency System	06
Unit 5	Currency and India's Monetary Policy	10
Module 4	**Role of the State (the British government) in the economic (under) development of India**	**06**

Suggested readings: Dharma Kumar : Cambridge Economic History of India Vol. II (Orient Longman in association with Cambridge University Press).
Dhires Bhattacharyya : A Concise Economic History of India (Progressive Publishers)
A.K. Bagchi : Private Investment in India (1900-1939), Cambridge University Press
Bipan Chandra : Rise and Growth of Economic Nationalism in India (People's Publishing House, New Delhi)
Jathar and Beri : Indian Economics, vols. I and II (O.U.P.).
D.R. Gadgil : The Industrial Evolution of India in recent times (O.U.P.).

PAPER XIV   **INTRODUCTION TO ECONOMETRICS**   **Full Marks: 50**

Module 1	**Simple Linear Regression Model**	**20**

Specifications of the Model – Assumptions – Deriving the Ordinary Least Squares (OLS) Estimates – Gauss Markov Theorem – Estimation of the Error Variance – Reverse Regression - 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.

Suggested readings: Maddala, G. S.: Introduction to Econometrics, Wiley
Ramanathan, R.: Introductory Econometrics with Applications, Harcourt Publishers.
Woolridge, J. M: Econometrics, CENGAGE
Johnstone & Dinardo, Econometric methods, McGraw Hill

Module 2   **Problems in OLS Methods**   **20**

Analysis of Residuals – Heteroschedasticity and Autocorrelation Problems – First Order Autoregressive Process – Consequences of applying OLS under Heteroschedasticity and Autocorrelation – Durbin-Watson Test, Glesjer Test, Goldfeld-Quandt Test.

Suggested readings: Maddala, G. S.: Introduction to Econometrics, Wiley
Ramanathan, R.: Introductory Econometrics with Applications, Harcourt Publishers.
Woolridge, J. M.: Econometrics, CENGAGE
Johnstone and Dinardo, Econometric methods, McGraw Hill

Module 3   **Introduction to Multiple regression and problem of Multicollinearity**   **10**

Motivation for Multiple Regression - Examples – Problem of Multicollinearity

Suggested readings: Maddala, G. S.: Introduction to Econometrics, Wiley
Ramanathan, R.: Introductory Econometrics with Applications, Harcourt Publishers.
Woolridge, J. M: Econometrics, CENGAGE
Johnstone and Dinardo, Econometric methods, McGraw Hill

Module 4   **Time-Series Analysis**   **14**

Models of Time Series: Purely Random Process, Random Walk, Moving Average, Auto Regressive Process, Auto Regressive Moving Average Process.
Different components of time series and their measurements.

Suggested readings: Maddala, G. S.: Introduction to Econometrics, Wiley
Nachane, D. M.: Econometrics: Theoretical foundations and empirical perspectives, OUP

PAPER XV	COMPUTER APPLICATIONS	Full Marks: 50

Module 1   **Basics of Excel**   **24**

Introduction to Excel
Excel Basics needed for Statistical Analysis of the Data
Data Presentation and Data Management
Formulas and Functions
Sort and Filter

Module 2   **Using Excel for Statistical Analysis**   **24**

Methods for Describing Univariate Data Set: Graphical, Numerical (Measure of Center, Spread, Relative Standing, Skewness, Kurtosis, etc.), Use of both the graphical and numerical techniques to present and interpret economic data
handling bivariate data
Correlation
Classical Regression
Detection and Solution of Heteroscedasticity and Autocorrelation
Concept of Multivariate Regression and Detection of Multicollinearity

| Module 3 | **Using Excel to solve equation systems** | **08** |
| | Use of Solver | |

| Module 4 | **Corel Draw** | **08** |
| | Graphical analysis using Corel Draw | |

SIXTH SEMESTER

| **PAPER XVI** | **PUBLIC ECONOMICS** | **Full Marks: 50** |

Module 1	**Objectives of government budget**	**21**
Unit 1	Musgrave's three branches: allocation, distribution, stabilization	03
Unit 2	Public goods (social wants) provisioning: The problem of preference revelation:	18

    (i)   The voting route: Majority voting and the voting paradox, Arrow's Impossibility Theorem, single-peaked preferences, the median voter, the inefficiency of majority voting equilibrium.

    (ii)   The tax route: The Benefit Approach to taxation and expenditure, Lindahl model & Pareto efficiency, preference revelation mechanism revisited.

Suggested readings: Musgrave, The Theory of Public Finance, MCGraw Hill
Stiglitz, J., Economics of the Public Sector, W.W. Norton
Ghosh & Ghosh, Economics of the Public Sector, Prentice Hall.

Module 2	**Tax Incidence and Principles of Taxation**	**30**
Unit 1	Incidence of taxation	05
Unit 2	Economic efficiency, optimal taxation.	13
Unit 3	Administrative simplicity, Flexibility, political responsibility	03
Unit 4	Fairness: The Benefit Approach, Ability-to-pay Approach (horizontal and vertical equity).	09

Suggested readings: Musgrave, The Theory of Public Finance, McGraw Hill
Stiglitz, J., Economics of the Public Sector, W.W. Norton
Ghosh & Ghosh, Economics of the Public Sector, Prentice Hall.
Allan, C.M., The Theory of Taxation, Penguin.
Atkinson, D. & Stiglitz, J., Public Economics, McGraw Hill.
Bagchi, Amaresh (ed) Readings in Public Finance, OUP.

Module 4	**Budget, Public Debt,Fiscal Federalism and Indian Budget**	**13**
Unit 1	Budget items and different concepts of deficits and surpluses	03
Unit 2	Public Debt	03
Unit 3	Principles of fiscal federalism with reference to India	02
Unit 4	Indian Central and State budgets in practice	05

Suggested readings: Stiglitz, J., Economics of the Public Sector, W.W. Norton
Ghosh & Ghosh, Economics of the Public Sector, Prentice Hall.

GOI, Budget documents including 'An Economic and Functional Classification of Central Government Budget'.
Houghton, R.W. (ed) Public Finance, Penguin.
Atkinson & Stiglitz, Public Economics, McGraw Hill.
Bagchi, Amaresh (ed) Readings in Public Finance, OUP.
Tapas Mazumdar (ed) Man, Nature & the Indian Economy, OUP.

PAPER XVII **DEVELOPMENT ECONOMICS II** **Full Marks: 50**

Module 1	**Inequality and Poverty**	**16**
Unit 1	Meaning of inequality – Measures (Lorenz curve, Gini Coefficient) - Kuznets inverted U hypothesis.	04
Unit 2	Relative and absolute deprivation with respect to income - Concept of poverty line - Measures (HCR, PGR, Human Poverty Index) - Social dimensions of poverty (rural, ethnic minorities and indigenous population) - class decomposable poverty measure by Foster-Greer-Thorbecke - World Bank approach to tackling poverty. How serious is the Neglect of Intra-Household Inequality? - Improving Health and Education: Why Increasing Income is not Sufficient	12

Suggested readings: Todaro & Smith: Economic Development, Pearson.
Debraj Ray: Development Economics. Oxford.
World Development Report, 2001
Subramanian, S. (ed.): Measurement of Inequality and Poverty
Banerjee, A. V., Benobou, R. and Mookherjee, D. (Ed.): Understanding Poverty
Sen, A.K. Inequality re-examined. Oxford.

Module 2	**Economics of the Household and Gender Disparities**	

Module 2 **Economics of the Household and Gender Disparities** **10**

Traditional models of household decision-making – Cournot-Nash bargaining approach – Intra-household resource allocation and disparities – Gender issues - Measuring Intra-household inequality; Gender inequality and economic growth.

Suggested readings: Sen: "Economics of the family" (in Uberoi ed Family, Kinship and Marriage in India)
Bina Agarwal: Field of one's own: gender and land rights in South Asia, Cambridge University Press (Chapter 2)
Alderman, Harold, Lawrence Haddad and John Hoddinott, eds. (1997): "Intrahousehold Resource Allocation: Models, methods and policy." Johns Hopkins University Press.
Blackden, C.M., and C. Bhanu (1999): 'Gender, Growth, and Poverty Reduction', *World Bank Technical Papers* 428, Special Programme of Assistance for Africa, 1998 Status Report on Poverty, World Bank: Washington DC.
Klasen, S. (1999): Does Gender Inequality Reduce Growth and Development? Evidence from Cross-Country Regressions. Policy Research Report on Gender and Development Working Paper Series, No. 7.

Social Watch (2005) Roars and Whispers, Gender and Poverty: Promises versus Action, Social Watch, Montevideo.

Module 3   Human Development   **16**
Importance of Health and Education – Education and Health as Joint Investments for Development – Human capital approach
Incorporating gender issues in Human Development - Gender-Related Development Index (GDI), Gender Empowerment Measure (GEM) and their limitations – moving towards Gender, Institutions and Development (GID) - Social Institutions and Gender Index (SIGI).

Suggested readings: Todaro & Smith: Economic Development.
Dasgupta, P.: Measuring the Quality of Life, *World Development*, 20(1): 119-131.
Abu-Ghaida, D., and S. Klasen (2004). 'The Costs of Missing the Millenium Development Goals on Gender Equity', *World Development* 32: 1075-1107.
Dijkstra, A.G. and Hanmer, L.C. (2000) 'Measuring socio-economic gender inequality: Towards an alternative to the UNDP Gender-Related Development Index', Feminist Economics, 6(2), pp. 41–75.
Jütting, J. P., Morrisson, C., Johnson J. D. and Drechsler, D. (2006). Measuring Gender (In) Equality: Introducing the Gender, Institutions and Development Data Base (GID), OECD Development Centre Working Paper No. 247.
Branisa, B., Klasen, S. and Ziegler M. (2009) New Measures of Gender Inequality: The Social Institutions and Gender Index (SIGI) and its Subindices. Courant Research Centre, Georg-August-Universität Göttingen Discussion Papers on 'Poverty, Equity and Growth in Developing and Transition Countries: Statistical Methods and Empirical Analysis' No. 10.

Module 4   Inequality in Health and Health Care   **12**
Poverty, inequality and health in international perspective: a divided world? - Global burden of disease - Government Intervention.
Do health care systems contribute to inequalities? - Equity in distribution of health care – measurement – horizontal inequity and vertical equity – health concentration curve; Equity in health care financing – vertical equity, Kakwani's Progressivity Index, the relationship between progressivity and health care financing systems, horizontal equity

Suggested readings: S. Anand, F. Peter and A. Sen (edtd.): Public Health, Ethics and Equity (Papers 1 and 2)
D. Leon and G. Walt (edtd.): Poverty, Inequality and Health: An International Perspective (Papers 1 and 9)
Morris, Devlin and Parkin: Economic Analysis in Health Care (Chapter 5 and 7)
Gwatkin, D. R . (2000): "Health Inequalities and the Health of the Poor: What do we know? What can we do?" *Bulletin of the World Health Organization* 78(1): 3-18.
http://www.who.int/docstore/bulletin/pdf/2000/issue1/bu0287.

pdf

Sen, Amartya. "More than 100 Million Women Are Missing." *The New York Review of Books* 37(20) (Dec 20, 1990). http://ucatlas.ucsc.edu/gender/Sen100M.html

Lopez, Alan D., Colin D. Mathers, Majid Ezzati, Dean T. Jamison, and Christopher J. L. Murray (2006). "Global Burden of Disease and Risk Factors" http://www.dcp2.org/pubs/GBD.

Module 5	**Inequality in Education**	**10**

Demand and supply of education - Cost of education - Education financing – Teaching and outcomes - Gender inequalities - Child Labor - Educational Systems and Development.

Suggested readings: Todaro and Smith, Development Economics, Addison Wesley.

Orazem, Peter F. and Elizabeth M. King (2009). "Schooling in Developing Countries: The Roles of Supply, Demand and Government Policy." In Schultz, T. and John Strauss, eds., Handbook of Development Economics, Volume 4. Amsterdam: North Holland, Chapter 55, pp. 3475-3559.

Glewwe, Paul, and Michael Kremer (2008). "Schools, Teachers, and Education Outcomes in Developing Countries." In Hanushek, Eric and Finis Welch, eds., Handbook of the Economics of Education, Volume 2. Amsterdam: North Holland, Chapter 16, pp. 945-1017.

PAPER XVIII	INDIAN ECONOMY IN POST-INDEPENDENCE PERIOD	Full Marks: 50

SECTION I: Prior to Economic Reforms (1991)

Module1	**Indian Economy at the time of Independence**	**02**

Features of the Indian Economy around 1947-1950

Suggested readings: Uma Kapila , Indian Economy ,Academic Foundation, Chap. 1
Bipan Chandra in Bimal Jalan (ed.) Indian Economy: Problems and Prospects, Penguin Books India (P) Ltd.

Module2	**Planning: Evolution of India's development goals and strategies**	**20**
Unit 1	Background and structure of planning	04
Unit 2	Structural constraints and Indian development strategy: Debates between Public sector vs. Private sector, Consumer goods vs. Capital goods, Import substitution vs. Export promotion.	06
Unit 3	Agriculture Industry relationship – Food crisis of the sixties	03
Unit 4	Poverty Eradication	04
Unit 5	Regional Inequalities	03

Suggested readings: Uma Kapila, Indian Economy, Academic Foundation, Chapters 1, 2, 3, 11
Chakraborty, S., The Indian Development Experience, O.U.P.

Bhagwati J. and Chakraborty S., Contributions to Indian
Economic Analysis, Lalvani Publishing House
Streeton and Lipton, The crisis in Indian Planning, O.U.P.
Pramit Chaudhuri, The Indian Economy, Vikas Publishing
House

Module 3	**Major issues and their impact in Indian Agriculture**	**15**
Unit 1	Green Revolution in India	04
Unit 2	Land Reforms	04
Unit 3	Tenancy of different kinds and their effects	02
Unit 4	Marketable Surplus	03
Unit 5	Minimum Agricultural Prices	02

Suggested readings: Pramit Chaudhury (ed.), Readings in Indian Agricultural
Development, George Allen and Unwin Ltd.
Charan Wadhwa (ed.), Some Problems of India's Economic
Policy, Tata Mcgraw Hill Publishing Co. Ltd.
C.H. Hanumanth Rao, Technological Change and Distribution
of Gains in Indian Agriculture, Macmillan
A.M. Khusro, Readings in Indian Agriculture
S. Cheung, Theory of Share Tenancy, University of Chicago
Press
Jalan (ed.) Indian Economy ; Problems and Prospect, Penguin
Books India Pvt. Ltd.

Module 4	**Major issues in Indian Industry and their impact**	**05**
Unit 1	Industrial stagnation – causes and remedies	03
Unit 2	Industrial licencing – justification and problems	02

Suggested readings; Uma Kapila, Indian Economy, Academic Foundation, Chapter
18.
Rakesh Mohan in Bimal Jalan (ed.) Indian Economy: Problems
and Prospects, Penguin Books India Pvt. Ltd.
Bagchi and Banerjee, Change and Choice in India Industry,
K.P. Bagchi and Co.
Bhagwati and Desai, Planning for Industrialization, OUP.

Module 5	**Poverty and Unemployment in India**	**06**
Unit 1	Measurement of poverty	02
Unit 2	Programmes for removal of poverty	02
Unit 3	Different types of unemployment in India	02
Module 6	**The external sector of the Indian Economy – Pattern of export and import trade prior to 1991 – Various problems**	**02**

Suggested readings: Uma Kapila, Indian Economy, Academic Foundation
Bhagwati and Srinivasan, Foreign Trade Regimes and
Economic Development ; India, Macmillan
Wadhwa (ed), Some problems of India's economic policy, Tata
Mcgraw Hill Publishing Co. Ltd.

<div align="center">**SECTION II: Post Reform Period**</div>

Module 1	**Reforms in the Indian tax structure**	**04**
Unit 1	Reforms in tax structure – the report and rcomendations of the Chelliah Committee, 1991	02
Unit 2	Reforms in indirect taxes	01
Unit 3	Reviewing the policy of deficit financing	01

Suggested readings: Report of the Chelliah Committee on tax reform, 1991
Report of the Kelkar Committee on direct and indirect tax reform, 2003

Module 2	**Monetary Policy and the Reserve Bank of India**	**05**
Unit 1	Reviewing recent changes in the Monetary Policy of the Reserve Bank of India – the correct mix between growth promoting measures and control of inflation- which policy instruments used and to what extent?	03
Unit 2	Recommendations of the Sukhamay Chakraborty Committee (1985) regarding working of the monetary system in India.	01
Unit 3	Capital market in India – its structure – SEBI and the growth of the capital market	01

Suggested readings: Report of the Chakraborty Committee, 1986
Bulletins of the Reserve Bank of India
Reports on Currency and Finance, Government of India

Module 3	**International Trade and Capital Account Convertibility**	**05**
Unit 1	Foreign Trade Policy, 2009-2014	02
Unit 2	Special Economic Zones – arguments in favour of and against them	01
Unit 3	Foreign Investment Inflows since 1991 – FII and FDI	01
Unit 4	Recent changes in Exchange Rate Policy – the question of Capital Account Convertibility	01

Suggested readings: Report of the Tarapore Committee, 2006
EXIM Policy of the Government of India, 2009 onwards
Singh, K.:Foreign Direct Investment in India: A Critical Analysis of FDI from 1991-2005, Centre for Civil Society, New Delhi, 2005

PAPER XIX	**INTERNATIONAL ECONOMIC ORDER**	**Full Marks: 50**

Module 1	**Salient features of globalization**	**04**
	Different world views about the global economy and its dynamics – Neo-liberal versus the more radical positions	

Suggested readings: Sinha, Anup: "Globalization: Features and Possibilities" in A. Sen and P.K. Sett (ed.) Managing Business in the 21st Century Oxford India Paperbacks, New Delhi 2006

Module 2   **Rise of the Modern Welfare State**   **04**
The Great Depression and the rise of the Welfare State

Suggested readings: Barr, N.: Economics of the welfare state. New York: Oxford University Press

Module 3   **Global Institutions and New Economic Order**   **06**
Unit 1   The Bretton Woods Institutions
Unit 2   GATT and the advent of the WTO   **08**

Suggested readings: Sabine, Dammasch: The Bretton Woods Institution: A Lesson from History.
Stiglitz, J: Globalization and its discontents. W.W. Norton & Co.

Module 4   **Globalization and Innovations**   **06**
Globalization and Innovations - social and economic consequences

Suggested readings: Dorf, Richard: Technology, Humans and Society: Towards a Sustainable World Academic Press, UK 2001 (pages 174-190)
O'Brien, Roberts and Marc Williams: Global Political Economy: Evolution and Dynamics Palgrave Macmillan, NY, 2007. Chapter 6 (pages 174-207)

Module 5   **Globalization and Market Integration**   **06**
Globalization and Market Integration – rise of corporate power

Suggested readings: Krugman, P. and M. Obstfeld International Economics, 6th Edition, Pearson Education, 2005. Chapters14 and 15 (pages 389 to 464).
O'Brien, Roberts and Marc Williams: Global Political Economy: Evolution and Dynamics Palgrave Macmillan, NY, 2007. Chapter 5 (pages 137-173)
Dornbusch, Rudiger: Open Economy Macroeconomics Basic Books New York, 1980. (pages 175-214)

Module 6   **Instability of Growth**   **06**
Globalization and Instability of GDP growth – crisis and contagion

Suggested readings: Ellis, Joseph: Ahead Of The Curve: A Commonsense Guide To Forecasting And Market Cycles Harvard Business School Press, 2005 Chapters 1-6, (pages3-72)
Casti, John: Complexification Abacus, 1994 Chapter 1 (pages 1-42)
Krugman, P. The Return Of Depression Economics Penguin Books 2000 Chapters 5-7 pp 85-136
Rakshit, M. K.: "The Subprime Crisis: A Primer" in Money and Finance Volume 3, Number 3, May 2008 (pages 75-124)
Krugman, P. and M. Obstfeld International Economics,

6th Edition, Pearson Education, 2005. Chapter 21 (pages 668 - 696).
Rodrick, D. Growth after the Crisis.
http://www.growthcommission.org/ storage/ cgdev/documents/financial_crisis/rodrikafterthecrisis.pdf
Carmen Reinhart and Ken Rogoff, This Time is different: Eight centuries of financial folly. Princeton University Press 2009

Module 7	**Inequality of Income and Wealth**	**06**

Globalization and Inequality – intra- versus inter-generational resource use

Suggested readings: Wade, Robert H. "Globalization, Poverty and Inequality" in John Ravenhill (ed.) Global Political Economy Oxford University press Oxford, 2005 (pages 291-316)
Dasgupta, P: Human Well-being and the Natural Environment Oxford University Press, New Delhi 2001 (pages 86-161)
Stern, N. "The Economics of Climate Change" American Economic Review Volume 98, Number 2, May 2008
Starke, Linda (ed.): 2008 State of the World: Innovations for a Sustainable Economy (pages 75 – 150)

Module 8	**Globalization and Environment**	**06**

Environmental issues - economics of climate change

Suggested readings: Panayotou, T. Globalization and the environment.
Lord Nicholas Stern, Stern review on the economics of climate change
Lord Nicholas Stern, What is the economics of climate change, World Economic Affairs, 7(2), 2006: 1-10

Module 9	**Millennium Development Goals**	**04**

Millennium Development Goals

Suggested readings: UNDP: Millenium Development Goals Report: An assessment, Vol 1.

Module 10	**Possible future scenarios**	**08**

Unit 1   Future of the Nation State and Global Governance
Unit 2   Individual, Society and Economy
Unit 3   Economic possibilities for our grandchildren

Suggested readings: Nayyar, Deepak: "Towards Global Governance" in Nayyar, Deepak (ed.): Governing Globalization Oxford University Press, New Delhi 2002 (pages 3-18)
You, Jong-Il: "The Bretton Woods Institutions:Evolution, Reform, and Change" in Nayyar, Deepak (ed.): Governing Globalization Oxford University Press, New Delhi 2002 (pages 209-237)

Stiglitz, Joseph: "Globalization and the Logic of International Collective Action: Reexamining the Bretton Woods Institutions" in Nayyar, Deepak (ed.): Governing Globalization Oxford University Press, New Delhi 2002 (pages 238-253)

Costanza, Robert: "Four Visions of the Century Ahead: Will it be Star Trek, Ectopia, Big Government, or Mad Max?" in Dorf, Richard: Technology, Humans and Society: Towards a Sustainable World Academic Press, UK 2001 (pages 190-197)

Korten, David: "System Design for a Post-Corporate World" in Dorf, Richard: Technology, Humans and Society: Towards a Sustainable World Academic Press, UK 2001 (pages 197-201)

Laubacher, Robert and Thomas Malone: Two Scenarios for 21st Century Organizations: Shifting Network of Small Firms or All-Encompassing "Virtual Countries"? Working Paper 21C WP #001 (1997) Sloan School of Management, MIT.

PAPER XX	PROJECT / TERM PAPER	Full Marks: 50

Guidelines for Project / Term Paper

1. Each student will prepare a term paper not exceeding 5000 words (excluding charts, diagrams, tables etc.).

2. The term paper may be descriptive, exploratory or empirical.

3. The selection of the topic will be from the subjects covered in the undergraduate economics honours syllabus.

PRESIDENCY UNIVERSITY
B.A./B.Sc. Elective Extra Departmental Course in Economics
Course A
Total Marks 300

PAPER I	MICROECONOMICS I	Full Marks: 50

Module 1	**Introduction to Price Theory**	**16**
Unit 1	What is economics – Scarcity and choice – Opportunity cost - Economic problems – Economic systems - Branches of economics – Microeconomics and Macroeconomics - Positive and Normative Economics - Economic agents - Circular Flow of Income	06
Unit 2	Elementary concepts of market demand and market supply curves - Market equilibrium.	05
Unit 3	Determinants of market demand and market supply – comparative statics.	05
Module 2	**Theory of Consumer Behaviour**	**24**
Unit 1	Cardinal utility – law of diminishing marginal utility – derivation of the Marshallian demand curve and its elasticity implications.	06
Unit 2	Ordinal utility – axioms; indifference curves, budget constraint and consumer's equilibrium. Price – consumption curve – income-consumption curve and Engel's curve – demand elasticities and classification of commodities: normal, inferior and Giffen goods. Substitution and income-effects and law of demand.	18
Module 3	**Producer's Behaviour**	**24**
Unit 1	Technology and technological efficiency – general concept of production function – concepts of total product, average product and marginal product – economic range of production – return to factor and returns to scale – isoquants and diminishing rate of factor substitution – elasticity of substitution.	10
Unit 2	Economic / Opportunity cost and accounting cost, concept of sunk cost; time dimension of cost – cost in the short run – total cost – fixed and variable cost – marginal cost – average cost – derivation of short run cost – long run cost function – functional coefficient and shape of long run average cost.— relation between short run and long run cost; expansion path; relation between expansion path and long run total cost curve.	10
Unit 3	Revenue – Total Revenue – Average Revenue – Marginal Revenue. Revenue and price elasticity of demand.	04

Suggested readings: Lipsey and Chrystal: An Introduction to Positive Economics, OUP
Samuelson, P. A. and W. D. Nordhaus: Economics, Mc-Graw Hill
Stiglitz and Walsh: Economics, W.W. Norton & Company

PAPER II	MACROECONOMICS I	Full Marks: 50

Module 1	**Introduction to Macroeconomics**	**04**
Unit 1	Introduction to macroeconomic variable	02
Unit 2	Microeconomic and macroeconomic approache	02
Module 2	**National Income Accounting**	**20**
Unit 1	GDP, GNP, NDP, NNP and NI	06
Unit 2	Circular flow of income	02
Unit 3	Measurement of National Income – problems encountered	08
Unit 4	National income as a measure of welfare	04
Module 3	**Determination of Income – Simple Keynesian Model**	**15**
Unit 1	Keynesian consumption function	05
Unit 2	Equilibrium in the commodity market	05
Unit 3	Multiplier	05
Module 4	**Classical Theory of Employment and Income**	**15**
Unit 1	Say's law of markets	05
Unit 2	Theory of employment	10
Module 5	**Investment**	**10**
Unit 1	Classification of investment: Business fixed investment, Inventory investment, Residential investment	05
Unit 2	Determinants of investment	05

Suggested readings: Samuelson and Nordhaus, Economics, McGraw Hill
Stonier and Hague, A Text Book of Economic Theory, Longman Group
Lipsey, An Introduction to Positive Economics, Weidenfeld and Nicholson

PAPER III	MICROECONOMICS II	Full Marks: 50

Module 1	**Introduction to Market Economics** Concepts of Perfect Competition, Monopoly, Monopolistic Competition and Oligopoly	**04**
Module 2	**Perfect Competition** Assumptions; economic vs. accounting profit; short-run profit maximization – short-run supply curve of the firm and the industry; output choice and competitive equilibrium in the long run – economic rent and profit; long-run industry supply curve under constant, increasing and decreasing costs; consumer's and producer's surplus – effects of tax and subsidy – deadweight losses.	**20**
Module 3	**Monopoly** Profit maximization of a single plant monopolist Measuring monopoly power - sources of monopoly power – social costs of monopoly power – rent seeking, price regulation and natural monopoly; limiting market power –	**20**

antitrust laws.
Capturing consumer surplus: price discrimination

Module 4	**Factor Market**	**20**
Unit 1	Marginal Productivity Theory of distribution – factor price determination	04
Unit 2	Theory of Rent – Ricardian Theory and Modern Theory	04
Unit 3	Theory of Wage including Role of Trade Unions	06
Unit 4	Theory of Interest – Loanable Fund Theory and Liquidity Preference Theory	03
Unit 5	Alternative Theories of Profit	03

Suggested readings: Lipsey and Chrystal: An Introduction to Positive Economics, OUP

Samuelson, P. A. and W. D. Nordhaus: Economics, Mc-Graw Hill

Stiglitz and Walsh: Economics, W.W. Norton & Company

Stonier and Hague, A Text Book of Economic Theory, Longman Group Ltd., London

PAPER IV	**MACROECONOMICS II**	**Full Marks: 50**
Module 1	**Money and Banking**	**20**
Unit 1	Definition and functions of money	02
Unit 2	Measures of money supply – M1, M2, M3 and M4	02
Unit 3	Functions of commercial banks	04
Unit 4	Money creation by commercial banks	04
Unit 5	Functions of the central bank	04
Unit 6	Control of money supply by the central bank	04
Module 2	**Quantity Theory of Money**	**08**
Unit 1	Fisher's version	04
Unit 2	Cambridge version	04
Module 3	**Inflation**	**22**
Unit 1	Definition and measurement of inflation – price indexes(WPI and CPI)	04
Unit 2	Impact of inflation on the economy	04
Unit 3	Sources of inflation: Demand-pull inflation, Cost-push inflation	06
Unit 4	Remedies to inflation - Monetary measures - Fiscal measures - Other measures	06
Module 4	**Open Economy Macroeconomics**	**14**
Unit 1	Balance of Payment	04
Unit 2	Determination of national income in an open economy	04
Unit 3	Exchange rate: Definition, Determination, Fixed rate regime, floating rate regime and managed float	06

Suggested readings: Samuelson and Nordhaus, Economics, McGraw Hill

Stonier and Hague, A Text Book of Economic Theory, Longman Group Ltd., London

Lipsey, An Introduction to Positive Economics, Weidenfeld and Nicholson

Gupta, Monetary Economics, S. Chand and Co

PAPER V INDIAN ECONOMIC PROBLEMS **Full Marks: 50**

Module 1	**The Indian Economy: An Overview**	**05**
Unit 1	The structural change – sectoral and spatial -- of Indian economy since independence	02
Unit 2	India's per capita income and its growth both in comparison to its own past and to the rest of the world. India in terms of Human Development Index.	03
Module 2	**Indian Planning**	**13**
Unit 1	Background for Indian Planning; Evolution of priorities and strategies of India's Five Year Plans.	05
Unit 2	Assessment of achievements and failures of Planning.	08
Module 3	**Indian Agriculture**	**11**
Unit 1	Characteristics of Indian agriculture at the time of independence	02
Unit 2	Assessment of Land Reform programmes	03
Unit 3	Green Revolution strategy and its effects	05
Unit 4	Agriculture in the post-Reform India	01
Module 4	**Indian Industry**	**11**
Unit 1	Composition of Indian industry.	02
Unit 2	Evolution of industrial policy in India.	06
Unit 3	Industry in post-Reform India.	03
Module 5	**Banking and Finance in India**	**10**
Unit 1	Role of the banking sector in economic development of India.	04
Unit 2	Reforms in the banking sector.	03
Unit 3	Development of capital market in India.	03
Module 6	**Indian Public Finance**	**10**
Unit 1	Central and state budgets – revenue and capital accounts, heads of expenditure and receipt, plan & non-plan expenditures, developmental & non-developmental expenditures, concepts of different deficits.	05
Unit 2	Centre-State financial relation.	05
Module 7	**India's Balance of Payment**	**04**
Unit 1	Evolution of trade policy in India	02
Unit 2	Impact of trade liberalization on volume and direction of trade for India.	02

Suggested readings: Kapila, Uma: Indian Economy: Performance and Policies 2009-10, Academic Foundation
Kapila, Uma (ed.): India's Economic Development since 1947, Academic Foundation
Misra, S.K & Puri, V.K: Indian Economy, Himalayas Publishing
Agarwal, A.N: Indian Economy, Vikas Publishing

| **PAPER VII** | **DEVELOPMENT ECONOMICS** | **Full Marks: 50** |

Module 1 **Meaning of Economic Development**   **09**
Distinction between economic development and economic growth – per capita GDP and HDI.

Module 2 **Economic Systems**   **07**
Meaning of economic system; Institutions based on Tradition, Command, and Market ; Capitalist and Socialist Systems; Mixed economies

Module 3 **Vicious Circle of Underdevelopment**   **08**
The role of critical minimum effort and expectations

Module 4 **Development Planning**   **10**
Unit 1   Importance of Planning; types of Planning – imperative and indicative Planning; the institutions and instruments of Planning.   05
Unit 2   Balance among primary, secondary and tertiary sectors – the balanced vs. unbalanced growth theory.   05

Module 5 **Population, Capital and Technology**   **14**
Unit 1   Population and economic development – the interplay of the two.   04
Unit 2   The role of physical and human capital in economic development – problem of capital formation, technological progress and choice of technique in a less developed economy - role of institution building and incentive designing in economic growth and development.   10

Module 6 **Foreign Investment**   **08**
FDI as against portfolio investment; Role of foreign investment in filling the resource gap and technological gap – the role of MNCs in the developing countries.

Module 7 **Sustainable Development**   **08**
Meaning, importance, and basic issues.

Suggested readings: Grossman, G:Economic Systems (Prentice Hall)
Gill, R.T: Economic Development: Past and Present (Prentice Hall)
Todaro, M.P: Economic Development in the Third World (Longman)
Ray, D: Development Economics (OUP)
Myint, H: The Economics of the Developing Countries (B.I. Publications)
Dasgupta, P: A Short Introduction to Economics (OUP)
Salvatore, D. and Dowling, E: Development Economics (Schaum's Outline Series in Economics, McGraw-Hill)
UNDP: Human Development Reports (Different Years)

PRESIDENCY UNIVERSITY
B.A./B.Sc. Elective Extra Departmental Course in Economics
Course B
Total Marks 100

PAPER I	PRINCIPLES OF ECONOMICS	Full Marks: 50

Group A
Full Marks: 25

Module 1   **Introduction**   **10**

What is economics – Scarcity and choice – Opportunity cost - Economic problems – Economic systems - Branches of economics – Microeconomics and Macroeconomics - Positive and Normative Economics - Economic agents - Circular Flow of Income

Suggested readings: Lipsey and Chrystal: An Introduction to Positive Economics, OUP
Samuelson, P. A. and W. D. Nordhaus: Economics, Mc-Graw Hill

Module 2   **Elements of Markets**   **22**

Unit 1	Evolution of market economics – Price systems and the 'Invisible hand'	02
Unit 2	Elementary concepts of market demand and market supply curves - Determinants of market demand and market supply – Law of demand and supply – Exceptions – Concept of elasticity and determinants.	08
Unit 3	Difference between Cardinal Utility Approach and Ordinal Utility Approach in derivation of the demand curve	04
Unit 4	Concepts of Fixed and Variable Costs, Average and Marginal Costs	02
Unit 4	Perfect competition - Market equilibrium – comparative statics - stability.	06

Suggested readings: Lipsey and Chrystal: An Introduction to Positive Economics, OUP
Samuelson, P. A. and W. D. Nordhaus: Economics, Mc-Graw Hill

Group B
Full Marks: 25

Module 3   **National Income Accounting**   **16**

Unit 1	GDP, GNP, NDP, NNP and NI	06
Unit 2	Circular flow of income	02
Unit 3	Measurement of National Income – problems encountered	04
Unit 4	National income as a measure of welfare	04

Module 4   **Determination of Income – Simple Keynesian Model**   **12**

Unit 1	Keynesian consumption function	04
Unit 2	Equilibrium in the commodity market	04
Unit 3	Multiplier	04

Module 5	**Money**	**04**
	Money – its functions	02
	Demand and Supply of Money	02

Suggested readings: Samuelson and Nordhaus, Economics, McGraw Hill

Stonier and Hague, A Text Book of Economic Theory, Longman Group

Lipsey, An Introduction to Positive Economics, Weidenfeld and Nicholson

PAPER II	INDIAN ECONOMIC PROBLEMS	Full Marks: 50

Module 1	**The Indian Economy: An Overview**	**05**
Unit 1	The structural change – sectoral and spatial -- of Indian economy since independence	02
Unit 2	India's per capita income and its growth both in comparison to its own past and to the rest of the world. India in terms of Human Development Index.	03

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Unit 3	Development of capital market in India.	03

Module 6	**Indian Public Finance**	**10**
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Unit 2   Impact of trade liberalization on volume and direction of trade for India.   02

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Kapila, Uma (ed.): India's Economic Development since 1947, Academic Foundation
Misra, S.K & Puri, V.K: Indian Economy, Himalayas Publishing
Agarwal, A.N: Indian Economy, Vikas Publishing

Workshop for preparation of B. Sc. (Economics Honours) Syllabus

Panel of Resource Persons

1. Prof. Anup K. Sinha, Indian Institute of Management Calcutta
2. Prof. Anindya Sen, Indian Institute of Management Calcutta
3. Prof. Soumyen Sikdar, Indian Institute of Management Calcutta
4. Prof. Sarmila Banerjee, Economics Department, Calcutta University
5. Prof. Rajat Acharyya, Economics Department, Jadavpur University
6. Prof. Ambar Nath Ghosh, Economics Department, Jadavpur University
7. Prof. Ranjanendra Narayan Nag, Economics Department, St. Xaviers College
8. Prof Mallinath Mukherjee, Economics Department, St. Xaviers College