

Lesson Plan for Course: Paper-1**Marks:100**

Course coordinator :EKBAL HOSSAIN

Course Outcome :

After successful completion of this course students will be able to:

1. Understand the fundamental problems of an economy and optimal allocation of resources to meet the needs of the society.
2. Learn the market clearing mechanism for setting up equilibrium price and quantity depending on the demand and supply structures from aggregate to disaggregate unit level.
3. Learn how various economic agents such as, consumers; firms etc. behave rationally to optimize their goals given the economic resources.
4. Understand the short run and long run behaviour of firms in a given demand condition under perfectly competitive set up.
5. Understand nature, construction and measurement of key macroeconomic variables.
6. Understand the measurement of different components of national income and its importance as an indicator of human wellbeing.
7. Gets an idea regarding the determination of income in short run and long run with essential impacts of fiscal and monetary policy variables in different macroeconomic set up (Classical and Simple Keynesian and Complete Keynesian).

Course planner

Sl	Course Topic	Teacher	Class-hour	Remarks*
Jul,2017	1. INTRODUCTION: Nature and scope, Scarcity and choice, Concepts of demand and supply-Demand function, Supply function, Market equilibrium.	EH	8	
	5. PERFECT COMPETITON: Features, Short run and long run equilibrium of the firm.	NS	8	
	1. Macroeconomic Data: Macroeconomic Data: National Income accounting – GDP, GNP, NNP, NI, DPI.	AKR	9	
Aug,2017	1. INTRODUCTION: Impact of changes in demand and supply, Price system as an economic mechanism.	EH	8	
	5. PERFECT COMPETITON: Short run supply function, Industry equilibrium, Long run industry supply with or without external economies or diseconomies.	NS	8	
	1. Macroeconomic Data: Different methods of Calculating NI.	AKR	8	
Sep,2017	2.CONSUMER BEHAVIOUR: Assumptions on preference ordering, Indifference curve, Budget constraint and Consumer's equilibrium, Substitution effect (Hicks & Slutsky) and Income effect.	EH	6	
	The Economy in the Long run:	NS	6	

	The classical Analysis of the real sector –Determination of employment, income and interest rate.			
	1. Macroeconomic Data: Measurement of cost of living – CPI, GDP Deflator; Measuring Joblessness – Unemployment rate, Unemployment and GDP –Okun's Law.	AKR	6	
Oct,2017	2.CONSUMER BEHAVIOUR: Ordinary and Compensated demand curves, Inferior goods and Giffen goods.	EH	2	
	The economy in the Short run: Simple Keynesian analysis of aggregate demand with or without govt. sector,	NS	2	
	1. Macroeconomic Data: NI as a measure of economic welfare.	AKR	2	
Nov,2017	2.CONSUMER BEHAVIOUR: Price consumption and income consumption curves, Derivation of labour supply and intertemporal choice, Saving and borrowing. Revealed Preference – the weak axiom and substitution effect.	EH	7	
	3. DEMAND AND SUPPLY: Market equilibrium.			
	Multipliers, IS-LM analysis, Fiscal policy and Monetary policy.	NS	8	
	Introduction to economic fluctuation. Impact of shift of aggregate demand curve both in the shortrun and in the long run.	AKR	7	
Dec,2017	3. DEMAND AND SUPPLY: Stability of equilibrium, Elasticities of demand and supply, Consumer's and producer's surplus.	EH	7	
	IS-LM analysis in the shortrun and longrun.	NS	6	
	Impact of shift of aggregate demand curve both in the shortrun and in the long run.	AKR	6	
Jan,2018	3. DEMAND AND SUPPLY: Burden of indirect taxes and subsidies, Price and quantity controls, Minimum wage, Import tariff and quota.	EH	7	
	The complete Keynesian Model: A three sector model taking into consideration of product market, money market and labour market.	NS	7	
	Impact of shift of aggregate demand curve both in the shortrun and in the long run.	AKR	6	
Feb,2018	4. PRODUCTION AND COST: Production function, Total, Average and Marginal products, Isoquants and economic regions of production, Cost minimization and expansion path, Elasticity of substitution, Economies of scale. Cobb Douglas, Fixed coefficient and CES functions, Short run and long run costs .	EH	8	
	The complete Keynesian Model: A three sector model taking into consideration of product market, money market and labour market.	NS	8	
	Impact of shift of aggregate demand curve both in the shortrun and in the long run. Derivation of the cost	AKR	7	

	function from production function.			
Mar,2018	REVISION	EH	7	
	REVISION	NS	7	
	REVISION	AKR	7	
Apr,2018	REVISION	EH	7	
	REVISION	NS	7	
	REVISION	AKR	8	
May,2018	REVISION	EH	2	
	REVISION	NS	3	
	REVISION	AKR	3	
Total			208	

Resources :

Books:

1. Maddala & Miller – Microeconomics
2. Ferguson & Gould – Microeconomics Theory
3. Varian – Intermediate Microeconomics (3rd edition)
4. Henderson & Quandt – Microeconomic Theory- A Mathematical
5. Pindyck & Rubinfeld – Microeconomics
6. Mankiw - Macroeconomics (5th Edition)
7. Dornbusch, Fischer and Startz - Macroeconomics (8th Edition)
8. Branson – Macroeconomics - Theory and Policy (2nd Edition)
9. Archibold and Lipsey: A Mathematical Treatment of Economics

Lesson Plan for Course:Paper-2**Marks:100**

Course coordinator: Ekbal Hossain

Course Outcome:

After successful completion of this course students will be able to:

1. Perceive the characteristics of sample data using various methods of statistical measurements.
2. Understand the comparability, consistency, spreadness/concentration among different sets of sample data.
3. Understand the degree and the direction of association in bivariate setup.
4. Understand the transmission of basic mathematics that enables the creation of economic theory in general.
5. Understand the application of mathematical techniques to economic theory in general.

Course planner

Sl	Course Topic	Teacher	Class-hour	Remarks*
Jul,2017	Statistical data, Classification and presentation.	EH	8	
	Set Operations	NS	8	
	Index number, Fixed Base and Chain Base Index – Laspeyres, Paasche, Fisher.	AKR	9	
Aug,2017	Population and sample, Collection of data, Variable and attribute, Frequency distribution.	EH	8	

	Finite and infinite sets , Mapping of Set, Ordered Sets , Linear point Sets.	NS	8	
	Index number, Fixed Base and Chain Base Index – Laspeyres, Paasche, Fisher.	AKR	8	
Sep,2017	Diagrammatic representation of frequency distribution, Ogive.	EH	6	
	Elements of Calculus: Functions, Limits & Continuity.	NS	6	
	Cost of living index number.	AKR	6	
Oct,2017	Measures of Central tendency.	EH	2	
	Total derivatives, Partial derivatives	NS	2	
	Time Series.	AKR	2	
Nov,2017	Arithmetic mean, Median and mode (for both grouped and ungrouped data). Comparison of mean, median and mode, Geometric mean and harmonic mean, Composite mean.	EH	7	
	Homogenous function, Euler's theorem	NS	8	
	Trend, Polynomial trend & Logistic trend, Seasonal Variation.	AKR	7	
Dec,2017	Measures of Dispersion: Range, Mean deviation.	EH	7	
	Simple integration, Definite integrals.	NS	6	
	Maxima & Minima of functions (constrained or unconstrained) – Economic Applications. Utility Functions, Revenue Function, Cost Function, Profit Function. Maximising Excise – Tax & Revenue.	AKR	6	
Jan,2018	Standard deviation, Quartile deviation, Measures of relative dispersion, Curve of concentration.	EH	7	
	Some simple applications of mathematics on economic theory.: Domain & Range of the Cost function, Finding Marginal revenue (MR) function from Average revenue (AR) function.	NS	7	
	Given the production function $Q=f(K, L)$, Write the set notation of an isoquant. Given the average revenue function justify whether AR & MR curves are continuous.	AKR	6	
Feb,2018	Measures of Skewness and Kurtosis. Simple correlation and simple regression.	EH	8	
	Application of Matrix and Determinant to market models, National Income Determination and IS – LM model.	NS	8	
	Determinants – Minors and cofactors, Properties of determinant, Jacobian theorem, Matrix	AKR	7	
Mar,2018	REVISION	EH	7	
	REVISION	NS	7	
	REVISION	AKR	7	
Apr,2018	REVISION	EH	7	
	REVISION	NS	7	
	REVISION	AKR	8	
May,2018	REVISION	EH	2	
	REVISION	NS	3	

	REVISION	AKR	3	
	Total		208	

Resources :

Books:

1. N.G. Das – Statistical Method
2. Nagar & Das – Basic Statistics
3. Goon, Gupta & Dasgupta – Basic Statistics
4. Chiang & Wainwright – Fundamental Methods of Mathematical Economics
5. Mukherji & Pandit – Mathematical Methods of Economic Analysis
6. Mehta & Madnani – Mathematics for Economists
7. Archibald & Lipsey- A Mathematical Treatment of Economics

Lesson Plan for Course: Paper-3

Marks-100

Course coordinator: A.K.Roy

- Course Outcome

After successful completion of this course students will be able to:

1. Acquire knowledge regarding the short run and long run behaviour of firms in a given demand condition under different imperfectly competitive market set up.
2. Understand how to determine optimal price and employment of an input in different market structures and the role of the labour union in determining wage rates.
3. Check whether the independent action by each economic agent is consistent while there is interdependence among the economic agents.
4. Know how choice in the face of risk differs from choice in the absence of risk, how to measure and reduce risk.
5. Understand the microeconomic foundation of various aggregative concepts used in the previous course.
6. Understand the causes and effects of different types of inflation and inflation-unemployment tradeoff in an economy.
7. Recent development in macroeconomic concepts with special reference to Real Business Cycle and New Keynesian Economics.

Course planner

Sl	Course Topic	Teacher	Class-hour	Remarks
Jul, 2017	1. Monopoly and Monopolistic Competition: a) Monopoly: Sources of monopoly power, Index of monopoly power, Equilibrium with single plant, multiple plants, Price discrimination, Constrained revenue maximisation, Natural monopoly, Effects of different types of location, Dead-weight loss of monopoly.	AKR	13	
	1. Microfoundation of Macro behaviour: (i) Consumption function: Keynes and the	NS	12	

	consumption function, Secular stagnation & the consumption puzzle, Inter-temporal choice, Permanent income hypothesis and lifecycle hypothesis.			
Aug,2017	1. Monopoly and Monopolistic Competition: b) Monopolistic Competition: Features, Short-run & Long-run equilibrium, Excess Capacity.	AKR	12	
	1. Microfoundation of Macro behaviour: (ii) Investment function: Fixed investment; The neoclassical approach, Tobin's q, Residential investment, Accelerator model of investment.	NS	12	
Sep,2017	2. Oligopoly: Conjectural Variation & Reaction functions, Analysis of Cournot & Stackelberg Collusive Oligopoly & Prisoners' dilemma in cartel stability, Nash equilibrium of game.	AKR	9	
	1. Microfoundation of Macro behaviour: (iii) Demand for Money: Transaction demand for money, Precautionary demand for money, Speculative demand for money, The Regressive Expectations Model, The portfolio balance approach, The Baumol-Tobin models of Cash Management, Money as a consumer's and producer's good.	NS	9	
Oct,2017	3. Factor Pricing: Derived demand for a single input & multiple input in competitive market, Firm demand & industry demand.	AKR	3	
	1. Microfoundation of Macro behaviour: (iv) The supply of money: Definitions of Money supply (M_1 , M_2 , M_3 , M_4), Credit creation by commercial banks, Money multiplier, Instruments of monetary policy.	NS	3	
Nov,2017	3. Factor Pricing: Derived demand for a single input & multiple input imperfectly competitive markets, Firm demand & industry demand, Adding up problem, Collective bargaining & exploitation, Rent & Quasi-rent.	AKR	11	
	2. Inflation:- Definition and functions of money, Quantity theory of money, Money, prices and inflation, Inflation and interest rates.	NS	11	
Dec,2017	4. Welfare Economics: Conditions of Pareto optimality in pure exchange & in production, Optimality of perfect competition, Externalities & market failure.	AKR	9	
	2. Inflation:- The fisher effect, Future money and current prices, The social costs of inflation. 3. Aggregate supply and Phillips curve: Inflation, unemployment and Phillips curve, Shift of Phillips curve.	NS	10	
Jan,2018	5. Choice under Uncertainty: Describing Risk, Preferences towards risk, Reducing	AKR	10	

	risk, the demand for Risky assets-the trade-off between Risk & Return.			
	3. Aggregate supply and Phillips curve: Causes of inflation, Disinflation and sacrifice ratio, Rational expectation and painless disinflation. 4. Recent Developments in Macroeconomics: Rational expectations, Real business cycle, New Keynesian Economics.	NS	10	
Feb,2018	REVISION	AKR	12	REVISION
	REVISION	NS	11	REVISION
Mar,2018	REVISION	AKR	11	REVISION
	REVISION	NS	10	REVISION
Apr,2018	REVISION	AKR	11	REVISION
	REVISION	NS	11	REVISION
Total Class:200			200	

Resorces :

Books:

1. Pindyck&Rubinfeld
2. Dominick Salvatore
3. Handerson&Quandt
4. Maddala& Miller
5. Mankiw: Macroeconomics (6th edition)
6. W.H. Bon- Macroeconomic Theory & Polity (2nd edition)
7. Dornbusch, Fischer &Startz- Macroeconomics (9th edition)
8. SoumyenSikdar – Macroeconomics

Lesson Plan for Course: Paper-4

Marks-100

- Course coordinator: Niladri Saha
- Course Outcome

After successful completion of this course students will be able to:

1. Understand alternative conception of development and their justification.
2. Learn about various stages of growth along with various theories and models and strategy of growth.
3. Understand the basic demographic concepts and their evolution during the process of development along with various theories and model explaining the problems of a labour surplus economy
4. Learn different measures of poverty and inequality and explore the connection between growth and inequality.
5. Link the environment issues related with economic development and the question of sustainable development.
6. Understand how trade causes economic development for Less Developed Countries (LDCs), particularly with reference to the issues of Balance of Payment, economic dependency of LDC in terms of different theories.
7. Understand the arguments in favour of protection and how different types of trade protectionist measures affect social welfare of LDCs.

8. Interpret how inflow of foreign capital in terms of Multi National Corporations (MNCs) affects the economic development of host LDCs.
9. Explore the debate between state and market in solving the fundamental economic problems of an economy and how they address the issue of social welfare.
10. Understand the development of different International Financial Institutions like IMF, World Bank, WTO etc. and their functioning with special reference to LDCs.

Course planner

Sl	Course Topic	Teacher	Class-hour	Remarks*
Jul,2017	1. Trade and Development:- (a) Trade as an engine of growth – The historical perspective, Static and dynamic gains from trade, Trade as a rent for surplus, Some criticisms of Traditional Free Trade Theory in the context of the experience of developing nations (b) Arguments for protection – The Infant industry argument for tariff protection	NS	8	
	1.MEANING OF DEVELOPMENT: Issues of Economic development – Traditional approach (Economic & non-economic – Per capita income, Physical quality life index, Basic needs approach, Sustenance, Self esteem, Freedom from servitude) - Capability approach – Human development index – Gender related development index.	EH	17	
Aug,2017	1. Trade and Development:- (c) Terms of Trade and Economics Development – various terms of trade (net barter and income terms of trade) – Prebisch-Singer thesis and terms of trade debate (d) Alternative Industrialisation Strategy for developing nations – Import Substitution and Export promotion.	NS	8	
	2. STAGES OF GROWTH: Rostow and Marx in comparison with Rostow 3. SOURCES OF ECONOMIC GROWTH : (i) Labour: Demographic issues, Theory of demographic transition, Trap models and their criticism (Nelson's and Leibenstein's models may be discussed in brief.)	EH	16	
Sep,2017	1. Trade and Development:- (e) Multinational Corporations and Foreign Direct Investment – FOI and FPI; Two main forms of FDI (Greenfield investment & merger or acquisition); MNCs – main features, implications for the host nations; Foreign aid.	NS	6	
	3. SOURCES OF ECONOMIC GROWTH : (ii) Capital: Capital accumulation, Capital-output ratio, Technological progress - Concepts of Hicks,	EH	12	

	Harrod, Solow, Neutral Technological progress. 4. PROBLEMS OF LABOUR SURPLUS ECONOMY: Lewis model and its criticism, Nurkse's idea of disguised saving potential, Concept of labour surplus (disguised unemployment), Sen's Model Labour migration and Harris-Todaro model.			
Oct,2017	(2) Development and Underdevelopment as a historical process:- (a) Dependency theory of Baran and Frank	NS	2	
	5. DEVELOPMENT STRATEGY: Balanced vs. unbalanced growth, Choice of technique in labour surplus economy.	EH	4	
Nov,2017	(2) Development and Underdevelopment as a historical process:- (b) The concept of unequal exchange (3) Planning for Development:- Rationale for planning.	NS	7	
	5. DEVELOPMENT STRATEGY: Balanced vs. unbalanced growth, Choice of technique in labour surplus economy.	EH	15	
Dec,2017	(3) Planning for Development:- The instances of market failure and the role of state; Govt. failure and Resurgent preference for markets over planning; Decentralisation	NS	6	
	6. POVERTY INEQUALITY AND STANDARD OF LIVING: Measurement and issues, Lorenz curve, Gini Coefficient, Headcount index, Poverty gap, Inequality and development, Sen's Index.	EH	13	
Jan,2018	(4) Evolution of the International Economy:- The origin, objectives and functions of IMF and World Bank; The Third World Debt crisis and the structural adjustment policies adopted by IMF; The new International Economic Order	NS	7	
	7. THE ENVIRONMENT AND DEVELOPMENT: Sustainable development, common property resources (tragedy of the commons), Kuznet's curve.	EH	13	
Feb,2018	REVISION	NS	8	REVISION
	REVISION	EH	15	REVISION
Mar,2018	REVISION	NS	7	REVISION
	REVISION	EH	14	REVISION
Apr,2018	REVISION	NS	7	REVISION
	REVISION	EH	15	REVISION
Total			200	

Resources :

Books:

1. Meier: Leading Issues in Economic Development
2. Todaro & Smith: Economic Development
3. Hayami- Development Economics
4. Debraj Roy – Development Economics
5. Thirlwall; Growth and Development with special reference to Developing Economics (8th edition)
6. Sodersten & Read; International Economics (3rd edition)

Lesson Plan for Course: Paper-5**Marks :100**

- Course coordinator: Niladri Saha

- **Course Outcome**

On successful completion of this course students will be able to:

1. Understand the basis of trade between nations of the world, the notion of terms of trade and how free trade can be mutually beneficial for the trading nations in terms of the Classical and Neo-Classical theories of trade by exploring the idea of comparative cost advantage .
2. Evaluate the relationship between country size and gains from trade and how trade affects distribution of factor income among the trading nations .
3. Be familiar with, and be able to critically analyze the main arguments for protection and be able to critically evaluate the relevance and realism of arguments for free trade, taking into account the costs and benefits of different trade policy measures like tariff, quota, voluntary export restraints, export subsidy etc. on economic welfare of the nation .
4. Explain how international flow of goods, services and capital affects foreign exchange reserve as well as foreign exchange rate of a nation and how expenditure adjustment and expenditure switching trade policies help a nation to achieve both internal and external balance.
5. Understand the role of state in a mixed economy
6. Be familiar with different principles of taxation of the government and its impact on saving, risk bearing and work effort of economic agents
7. Distinguish between different concepts of deficit in government budget and how public debt can impose burden on a society

Course planner

Sl	Course Topic	Teacher	Class-hour	Remarks*
July 2017	GROUP – A: INTERNATIONAL ECONOMICS 1. The Theory of comparative Advantage and gains from Trade:- a. The concept of Production possibility curve (PPC) and community indifference curve– autarky equilibrium b. Gains from trade and its decomposition into gains	NS	25	

	<p>due to exchange and gains due to specialisation.</p> <p>c. Adam Smith and Absolute advantage theory of trade.</p> <p>d. David Ricardo and the theory of comparative advantage – The concept of opportunity cost, Derivation of PPC of trading nation with constant opportunity cost, Gains from trade; Determining the relative price of tradables after trade in terms of relative demands and relative supply curves, Derivation of world PPC, country size and gains from trade, limitations of the Ricardian model.</p> <p>e. Offer curve – Definition, Derivation of offer curve, Determination of elasticity of offer curve at a point on offer curve, Determination of free trade Terms of Trade. Concept of trade indifferent curve only, Ricardian offer curve</p>			
Aug 2017	<p>GROUP B: PUBLIC FINANCE 1. Economic Role of the State: Public goods and market failure, Distinction between private goods and public goods, Samuelson's solution for the optimal provision of public goods, Lindahl's Equilibrium for optimal tax sharing, Free rider problem, Justification of Government expenditure in defense, education, health, infrastructure.</p>	NS	24	
Sept 2017	<p>GROUP B: PUBLIC FINANCE 2. Principles of Taxation: Ability to pay and benefit approaches, Horizontal and vertical equity.</p> <p>3. Direct and indirect Taxation: Effect of Income tax on work effort, Saving and risk bearing, Incidence of sales and excise tax – excess burden of indirect taxation, value added tax.</p> <p>4. Public debt: Internal and external burden- Different concepts of deficit in Government's budget – Burden of internal public debt, Burden of public debt on future generation, External public debt, comparison of internal and external public debt.</p>	NS	18	
Oct 2017	<p>GROUP – A: INTERNATIONAL ECONOMICS</p> <p>2. Comparative Advantage in the Heckscher-Ohlin Trade model:</p> <p>a. The basic assumptions of the model Factor abundance defined in physical terms and by factor price</p>	NS	6	
Nov 2017	<p>GROUP – A: INTERNATIONAL ECONOMICS</p> <p>2. Comparative Advantage in the Heckscher-Ohlin Trade model:</p> <p>b. Heckscher – Ohlin Theorem (Statement & Proof in terms of physical and price definition of factor abundance)</p> <p>c. A comparison of comparative advantage in the Ricardian and in the Heckscher-Ohlin Trade model.</p> <p>3. Commodity and Factor prices under trade –</p>	NS	22	

	Factor price Equalisation: a. Factor price equalization theorem, Basic concept of factor intensity reversal. b. Empirical testing of H-O theorem : - Leontief paradox			
Dec 2017	GROUP – A: INTERNATIONAL ECONOMICS 4. Instruments of Restrictive trade:- a. Effect of tariff (import duty) and quota – some partial aspects b. Tariff versus Quota and their equivalence c. Effective rate of protection	NS	19	
Jan 2018	GROUP – A: INTERNATIONAL ECONOMICS 5. Tariff under optimal market conditions:- a. Tariffs and income distribution: The Stolper – Samuelson theorem b. Tariff, the terms of trade and domestic prices – the Metzler’s paradox (concept only) c. Tariff and the national income – the optimum tariff. 6. The Balance of payment: (BOP) a. BOP accounting principles; Current and capital account transaction, Statistical discrepancy b. Equilibrium and Disequilibrium in the BOP – autonomous and accommodating transactions	NS	20	
Feb 2018	GROUP – A: INTERNATIONAL ECONOMICS 8. Theory of Exchange Rate, Devaluation and Trade Balance: a. Imports, Exports and foreign exchange market - demand – supply framework. b. Different types of exchange rate system, fixed and flexible (clean or managed float) exchange system. (Concepts only) c. The working of fixed and flexible exchange rate system with special reference to – (i) foreign exchange risk, (ii) Inflation. d. Concept of Internal and external balance - The swan diagram – Expenditure switching and expenditure adjustment policies – Marshall – Lerner condition for successful devaluation of home currency. (Statement and implication only, no rigorous proof is required)	NS	23	
March 2018	REVISION	NS	21	
Total Class:178			178	

Resources:

Books:

- 1) Caves, Frankel & Jones – World Trade and Payments (9th Edition)
- ii) Salvatore – International Economics (8th Edition)
- ii i) Krugman & Obstfeld: International Economics – Theory and Policy (8th Edition)
- iv) Sodersten-International Economics (2nd Edition)
- v) Musgrave & Musgrave – Public finance in theory & Practice [2004]

- (vi) Due & Friedlaender – Govt. Finance (1897)
- (vii) Maddala & Miller – Microeconomics
- (viii) S.R. Chakraborty – Microeconomics
- (ix) Ambar Ghosh & Chandana Ghosh – The Economics of Public Sector [2008]
- (x) Ulbich – Public finance (2004) (on justification of Govt. Exp.)

Lesson Plan for Course: Paper-6**Marks: 100**

- Course coordinator: EKBAL HOSSAIN

- **Course Outcome**

After going through the course, the students will be able to:

1. Evaluate how the structure of Indian economy has changed in the planning era.
2. Understand the key economic issues related to Indian agriculture, industry, unemployment and poverty in both pre and post reform periods and their policy relevance.
3. Understand the rational and major objectives of India's Five Year Plans, how the emphasis of these objectives has changed over time and recent developments.
4. Examine the changes in the policies of the Government in pre and post reform periods in the fields of money and capital market, public economics and external sectors.

Course planner

Sl	Course Topic	Teacher	Class-hour	Remarks*
July 2017	1. Structure of Indian Economy: Changes in the pattern of inter sectoral distribution of national income, changes in the pattern of occupational structure.	EH	25	
Aug 2017	2. Agriculture: Farm size and productivity- controversial Indian experience, Marketable Surplus and Marketed Surplus of food grains, prices and average elasticity of Marketed Surplus. Different aspects of New Agricultural Strategy (Green Revolution)-output, employment and distribution of income & wealth. Land Reforms. Food security and government intervention in food grains. Problems of Institutional Credit in Indian agriculture. Impact of globalization in Indian agriculture.	EH	24	
Sept 2017	3. Growth and Stagnation in Indian Industries.(E). State initiative in industrialization. Evaluation of Industrial policies including Licensing Policies, Role, Performances and Weaknesses of Public Sector Industries. New Industrial policy in the post- globalization era. Disinvestment Policy. 4. Unemployment and Poverty: Nature and types of unemployment in India. Problems related to the measurement of Unemployment in India.	EH	18	
Oct 2017	Problems related to female and child labour in India. Poverty in India-Different estimates of poverty. Evaluation of different policies and programmes aiming	EH	6	

	at eradication of poverty.			
Nov 2017	5. Money and Capital Market: Reserve Bank of India and Indian Money market. Monetary policies in recent years. Relation between Money Market and Capital Market in India. Nationalization of commercial Banks and problems associated with Nationalized Banking Sector. Reforms in Monetary Sector and Capital Market in India.	EH	22	
Dec 2017	6. Indian Public Finance: Trends problems and Reforms. Central-State allocation of Financial Resources- Controversies, Recommendation of different committees in resolving this controversy .	EH	19	
Jan 2018	7. External Sector- Composition, Direction, and Trend in Foreign Trade. Problems related to the Balance of Payments. EXIM Policies and other recent measures (such as convertibility of rupee) to improve BOP .	EH	20	
Feb 2018	8. Rationale of Planning and Mixed Economy. Five Year Plans- Objective, achievement and failure. Financing of Five Year Plans : Special focus on 2 nd , 7 th and 9 th plans.	EH	23	
March 2018	REVISION	EH	21	
Total Class :178			178	

Resources :

Books:

1. Poverty and Development. Pramit Chaudhuri
2. Contribution to India's Economic Analysis. Bhagwati & ChGL-1abarty
3. Some Problems of India's Economic Policy. Ed. By Charan Wadhva.
4. Development Planning; Indian Experiences, S. ChGL-1obarty.
5. Planning in India. Desai
6. Recent Development and Future Prospect: Ed. By Lucas & Papanek.
7. Employment, Technology & Development. A.K.Sen.
8. The Indian Economy: Bimal Jalan.
9. On Economic Liberalisation. Deepak Nayar.
10. Planning for Industrialisation. Bhagwati & Desai.
11. Political Economy of Indian Agriculture. Ashok Rudra.
12. Essays in Honour of Manmohan Singh. Montek S. Ahluwalia.

Lesson Plan for Course: Paper 7

Marks:100

- Course coordinator :Asok Kr Roy
- Course Outcome

After going through the course, the students will be able to:

1. Learn conception and definitions of various statistical terms, rules and theorems along with the application of various univariate probability distribution functions.
2. Gather experience how to select samples from a population.
3. Learn how to draw inferences about an unknown population with the help of sample observations.
4. After going through the course, the students will be able to

5. Know the application of the mathematical tools such as: integration, differential equation, difference equation, Cramer' rule, matrix inversion to the economic analysis.
6. Understand the economic interpretation of duality theorem.
7. Evaluate how economic agents optimize their goals while they are interdependent.

Course planner

Sl	Course Topic	Teacher	Class-hour	Remarks*
July 2017	PROBABILITY THEORY AND DISRIBUTION: (i) Elements of Probability Theory: Sample space & events, Meaning of probability, Classical definition, Addition rule, Multiplication rule, Theorems of total probability – Mutually and non-mutually exclusive events, Conditional and statistical independence, Limitations of the classical definition, An axiomatic approach, Bayes' formula, Random variables, Probability mass and density functions, Marginal and conditional distributions, Expectations and variances of random variables	AKR	25	
Aug 2017	ELEMENTARY SAMPLING THEORY: Populations and sample, Parameter and statistic, Random sampling, Practical methods of drawing random samples, Random sampling measures, Sampling distribution of expectation and standard error.	AKR	24	
Sept 2017	CLASSICAL STATISTICAL INFERENCE: Basic concepts of Estimation, Desirable properties of estimators, Unbiasedness, Minimum variance, Simple methods of point estimation, Confidence interval, Testing of hypothesis, P-value, Type 1 and Type 2 errors, Simple application of tests for mean and variance of a Univariate normal population	AKR	18	
Oct 2017	1. Static equilibrium analysis and comparative statics: Meaning of partial and general equilibrium, Comparative static analysis using Cramer's rule. Applications: Simple Keynesian and IS-LM models, Rybczynski theorem and Stolper – Samuelson theorem.	AKR	6	
	2. Integration and dynamic analysis: a. Techniques of integration (definite and indefinite integral) Applications: from marginal function to total function, consumer's surplus, producer's surplus, investment and capital formation, present value.	AKR	22	
Dec 2017	2. Integration and dynamic analysis: b. First order and second order differential equations: Applications: Time path of price and quantity in competitive markets, time path of income in simple Keynesian model, Stability analysis, Time path of inflation and unemployment rates, Solow growth model. c. First order and second order difference equations: Applications: Cobweb model, Market model with inventory, Samuelson's multiplier – accelerator	AKR	19	

	interaction model, inflation and unemployment in discrete case.			
Jan 2018	3. Input – output analysis: A two sector Leontief static open model, Assumptions, Output solutions, Hawkins –Simon conditions and its economic interpretations, Linear programming interpretation, Consumption possibility Locus, Price system in LSOM. 4. Linear Programming (LP) The LP problem, Duality and economic interpretation, simplex method, complementary slackness relationship of primal and dual. Application: Diet problem, Transportation problem	AKR	20	
Feb 2018	5. Game Theory: Game Theory – Structure of Game, Pay off matrix, Two person zero sum game, saddle point, Pure strategy, Mixed strategy.	AKR	23	
Marh 2018	REVISION	AKR	21	
Total Class :178			178	

Resources :

Books:

- (i) Mathai & Rathi – Probability and Statistics
- (ii) Nagar & Das - Basic Statistics
- (iii) N.G. Das – Statistical Methods, (Vol II) [2005]
- (iv) Henderson & Quandt – Microeconomic Theory (3rd edition)
- (v) Dorfman, Samuelson & Solow–Linear Programming & Economic Analysis–
- (vi) Pindyck and Rubinfeld – Micro economics
- (vii) Varian – Intermediate Micro economics.

Lesson Plan for Course:Paper-8

Marks:100

- Course coordinator: Asok Kr Roy

- **Course Outcome**

1. On successful completion of this course students will be able to understand the impact of British rule and the British imperial policy in India in the pre-independence period with special reference to the issues of deindustrialization, commercialization of agriculture, drain of economic wealth, land revenue policy, development of railways and irrigation and foreign trade.
2. It will also enable the students to understand the comparative structural changes of Indian economy.
3. On successful completion of this course students will have hands on experience in data entry, analysis of data in terms of charts, diagrams and statistical measures through computers using statistical soft-wares both for primary and secondary data that will prepare students to handle data and project reporting.
4. On successful completion of this course students will have idea on presenting small research work on a specified manner on different contemporary socio-economic issues by applying research methodology, process of data presentation and economic analysis,

preparation of dissertation. It will prepare the students for concise form of presentation in their future academic and job assignments.

Course planner

Sl	Course Topic	Teacher	Class-hour	Remarks*
July 2017	GROUP B: PROJECT WORK	AKR	17	
	INDIAN ECONOMIC HISTORY Impact of British rules with special reference to (i) De-industrialization (ii) Commercialization of agriculture (iii) Economic drain.	EH	8	
Aug 2017	GROUP B: PROJECT WORK	AKR	16	
	INDIAN ECONOMIC HISTORY 1. Aspect of British Imperial policy: i) Land policy, ii) Railways & irrigation iii) Policy of discriminating protection	EH	8	
Sept 2017	GROUP B: PROJECT WORK	AKR	12	
	COMPUTER APPLICATION 1. Basics of computer application in economics 2. Operating systems, data entry	EH	6	
Oct 2017	GROUP B: PROJECT WORK	AKR	4	
	COMPUTER APPLICATION 3. Use of application software for solving statistical and quantitative problems in economics.	EH	2	
Nov 2017	GROUP B: PROJECT WORK	AKR	15	
	COMPUTER APPLICATION 3. Use of application software for solving statistical and quantitative problems in economics.	EH	7	
Dec 2017	GROUP B: PROJECT WORK	AKR	13	
	COMPUTER APPLICATION 3. Use of application software for solving statistical and quantitative problems in economics.	EH	6	
Jan 2018	GROUP B: PROJECT WORK	AKR	13	
	COMPUTER APPLICATION 3. Use of application software for solving statistical and quantitative problems in economics.	EH	7	
Feb 2018	REVISION	AKR	15	
	REVISION	EH	8	
Mar 2018	REVISION	AKR	14	
	REVISION	EH	7	
Total Class:178			178	

Resources :

Books:

- i) Dharma Kumar (ed.) Cambridge Economic History [Vol II]
- ii) V. B. Singh (ed.) Economic History of India
- iii) Dhires Bhattacharyya A Concise Economic History of India
- iv) Amiya Bagchi Private Investment in India (1800-1839)
- v) Computers Today: D.H. Sanders

For 1+1+1 System

vi) Analysis of Economic Data: Gary Koop