

## 151. ECONOMICS

Income and Substitution Effects (Slutsky and Hicks), Consumer surplus – implications. Revealed Preference Analysis, Hicks' Revision of Demand Theory. Isoquant Production Function; Returns to Scale; Linear Homogeneous Production function – Cobb Douglas production function, Hicks and Harrod Technical Progress. Cost Functions – short run and long run costs. Features of perfect competition. Determination of Market price and quantity, Short Run and Long run equilibrium of the firm and industry, Derivation of Supply curve, Monopoly: Short and long run equilibrium, Price discrimination. Monopoly power, Control and regulation of monopoly. Monopsony, Bilateral Monopoly; Chamberlain's Monopolistic Competition – Short and Long run equilibrium. Duopoly Models: Cournot, Bertrand, Edgeworth and Stackelberg Models. Oligopoly: Characteristics, Sweezy's kinked Demand model, Models of cartels and price leadership. Alternative Theories of the Firm: Baumol's Model, Williamson, and Marries models, , Bain's Limit pricing, Sylos-Labini and Modigliani's models.

Distribution: Ricardian and Modern Theories of Rent, Marginal Productivity theory of wages, neo-classical theory of interest, and theories of profit. Product Exhaustion theorem. Equilibrium Analysis: General Equilibrium: Walrasian model, Features of Market Equilibrium: Existence, Stability (Marshall and Walrasian conditions), Uniqueness. Cob-web models. Welfare Economics: Pigovian welfare economics, Pareto optimum conditions. Social welfare functions, Compensation principles, Arrow's impossibility theorem. Economics of Risk and Uncertainty: Role of expectations, Consumer's choice involving risk (risk takers, risk averse and risk neutral), Neumann – Morgenstern Index, Savage Hypothesis, Gambling and Insurance. National Income Accounting: Approaches of Macro Economics and Variables – Circular Flow of Income in two, three and four-sector economy; different forms of national income accounting – social accounting method.

Consumption Function: Consumption function – Keynes psychological law of consumption – implication of the law; short-run and long-run consumption function; Empirical evidence on consumption function; income – consumption relationship – absolute income, relative income, permanent and life cycle income hypotheses. Investment Function: Marginal efficiency of capital and investment. The accelerator, profit and theories and investment. Financial theory of investment Institutions and capital market in India. Primary and secondary markets and regulation of capital markets.

Supply of Money: Measures of Money Supply, theories of money supply, monetary transmission mechanism and monetary transmission mechanism in India, High powered money and money multiplier; monetary policy. Demand for Money and Investment Determination: Theories of demand for money – Classical approach to demand for money – Quantity theory approach, Cambridge quantity theory, Keynes liquidity preference approach, modern theory of interest rate determination. Post-Keynesian Theories of Demand for Money: Post-Keynesian approaches to demand for money – Patinkin and the Real Balance Effect, Approaches of Baumol and Tobin; Friedman and the modern quantity theory; Crisis in Keynesian economics and the revival of monetarism – Friedman Restatement of quantity of money and its critical appraisal.

Neo-classical and Keynesian Synthesis: Neo-classical and Keynesian views on interest; The IS-LM model; Extension of IS-LM model with government sector; Relative effectiveness of monetary and fiscal policies; IS-LM model in open economy, Monetary approach to balance of payments. Capital flows with fixed exchange rate, trade and capital flows with flexible exchange rate and critical look at IS-LM model. Theory of Inflation: Classical, Keynesian and Monetarist approaches to inflation; Structuralist theory of inflation; Philips curve analysis – Short run and long run Philips curve; the natural rate of unemployment hypothesis; Tobin's modified Philips curve and policies to control inflation. Business Cycles: Business Cycles – Theories of Schumpeter, Samuelson and Hicks – Interaction of multiplier and accelerator model, control of business cycles – relative efficacy of monetary and fiscal policies – Monetary policy and its objectives with special reference to Indian Economy. New Classical Macroeconomics: The new classical macroeconomic approach; Policy implications of new classical approach – Rational expectations theory, Role of expectations in macroeconomic analysis – Additive expectations. Supply side economics assumptions and evaluation.

Uses and limitations of Mathematics in Economics, Concept of function and type of functions, Concepts of derivative, Rules of differentiation. Interpretation of revenue, Cost demand, supply functions, Elasticities. Determinants and their Basic Properties, Solution of Simultaneous equations through Cramer's rule Matrices – Concept and types, Simple operation on matrices, matrix inversion, rank of matrix, concept of vector and its properties, Introduction to input-output analysis. Multivariable functions, Concept and types of production functions, rules of partial differentiation and interpretation of partial derivatives, Problems of maxima and minima in single and multivariable functions. Constrained optimization, Lagrangian function, simple economic applications, maximization of utility and maximization of profits, Introduction to linear programming, formulation of linear programming problem – its structure and variables, Nature of feasible, basic, optimal solution, Solution of linear programming through graphic method.

Definition of Statistics, Uses and limitation of Statistics in Economics, Methods of collecting data – census and sampling – their advantages and disadvantages, Measures of Central tendency – mean, median and mode, Measures of Dispersion – range, quartile deviation, mean deviation, standard deviation, variance, coefficient of variation, Gini coefficient. Basic concept of sampling – random and non-random sampling, simple random, stratified random sampling. Formulation of statistical hypotheses – null and alternative, Testing of hypothesis. Concept of correlation, Karl Pearson's Coefficient of correlation, Spearman's rank coefficient of correlation, Simple regression, Estimation of regression coefficients by ordinary least square methods, standard error or regression line. Concept of probability, Classical and empirical definitions of probability, laws of addition and multiplication, discrete random variable – its concept, mean and variance, Normal distribution – its concept and properties. Methods of constructing Index numbers and their uses, weighted and unweighted indices, Laspeyres's, Pasche's and Fisher's indices, Cost of living index numbers. Time series and analysis, components of time-series data, determination of secular trend by moving average and ordinary least square methods, Uses of seasonal indices, Estimation of linear and compound growth rate using OLS method.

Growth and Development -Measuring of Growth and Development – factors affecting Economic growth -traditional approach- Welfare oriented approach -Human Development approach essential components of Human Development- Human Development Index. Theories of Development Growth Models - Classical and Neo-Classical theories of Development - Schumpeter and Capitalist Development - Rostow's Stages of Economic Growth

- Marxian Growth Rates and Development Model. Harrod-Domar Growth Model - R.M. Sraffa's Model, Approaches to Development – Partial Theories of growth and development - The theory of the Big Push- Critical Minimum Effort and low level Equilibrium Trap.

The Theory of Balanced and Unbalanced Growth- Lewis Model of unlimited supply of labour - Simon Kuznets Economic Structure and Change. Choice of Techniques - Capital, labour and appropriate technology – Romar's endogenous growth model. Allocation of Resources - Investment Criteria – Role of labour orientation methods in the development of third world countries – Role of capital formation in developing countries-spread effects and backwash effects. Role of Technology in Economic Development. Theories of International Trade –Neo-Classical Theories; Heberler's Opportunity Cost Approaches; Modern theories of Trade – Hecksher and Ohlin Model; Leontief Paradox; Factor Price Equalization theorem. Gains from Trade: Measurement of Gains from Trade and their distribution; concepts of Terms of Trade – Income and Factorial Terms of Trade; Hypothesis of Secular deterioration of terms of trade and its implications for less developed countries – Immiserising Growth – Trade as an Engine of Economic Growth. Theory of Interventions: Tariff Issues, Quotas and its Economic effects; the political economy of non-tariff barriers and the implications-nominal, effective and optimum rates of tariffs - their impact and welfare implications; Trade under imperfective competitive market – EEC. Balance of Payments: Meaning and components of Balance of Payment, causes for disequilibrium in BOP and measures to correct; Expenditure reducing and switching policies, Marshall and Lerner's conditions.

Indian Economy during British rule, Commercialization of Agriculture, Process of Industrialization. Composition of Foreign Trade, GNP and Occupation, Trends in NI Growth & Structure; Physical Quality Life Index (PQLI), Human Development Index (HDI): GEM Nature and Magnitude of Workforce and Unemployment, Poverty and Inequality. Planning and NITI Aayog: Six decades of planned development - The National Institution for Transforming India (NITI Aayog) - Recent trends in sectoral rates of Growth in India – Indian Economy- inter-State variations in Development - Lopsided development – Organized and unorganized Sectors-emergence of informal sector in India. Industrial Sector- Industrial policies, Public and Private sector performance, Growth and pattern of industrialization, Small Scale sector, Privatization, Disinvestment and Exit Policy. Fiscal Federalism- Central state financial relations, finances of Central and state governments- Parallel economy, fiscal sector reforms in India, Monetary and Credit policies and financial sector reforms in India. Economic Reforms: Changing Role of State; Globalization of Indian Economy, WTO and its Impact, National agenda for Governance. Issues in Export – Import Policy and Foreign Exchange Management Act (FEMA); Exchange Rate Policy, Foreign Capital and MNCs in India; Trade Reforms in India.

Foreign exchange Rate : Foreign Exchange rate determination under the Gold Standard, Fixed and Flexible exchange rate, Purchasing Power Parity theory – India's foreign exchange reserves, convertibility of rupee, FEMA (Foreign Exchange Management Act)- Importance of International Trade for a Developing economy. Trade Problems of Developing Countries – Prebisch Singer and Unequal Hypothesis – Rise and Fall of Gold Standard and emergence of Brettonwoods system; role of International Institutions – IBRD, IMF, ADB in relation to Developing Countries. The Theory of Regional Blocs: Forms of Economic Co-operation; Inter-Regional Trade, SAARC/ SAPA and ASEAN Regions, Problems and prospects of Customs Union, Regionalism (EU, NAFTA), Multilateralism and WTO. India's International Trade – Problems of Trade and Trade Policies in India for the last five decades, changes in the direction and composition of trade and their implications. New Trade Policy in the Reform Period. India's balance of payment- Pre and Post Globalization Period. Management of balance of

payments- Fiscal and external policies, trade strategy, exchange rate management, reserve management strategy,- Trade reforms and its effect on balance of payments and growth. Trade and Development – Commercial Policy and Economic Development of less developed countries, Foreign Capital and Developing Countries, Problems of India's International Debt, Export Promotion Strategies and EXIM Policies.

Public Finance: Role of the state in Economic activity – Multiple theory of public house hold –distinction between private & public fiancé – public fiancé in developing countries. The Principle of maximum Social advantage – Musgrave's views – Mrs. Hicks optima of Public policy – Externalities and public goods – theory of second best – public choice theory. Taxation; Theories of Incidence - Traditional and Modern Approaches - Benefit Approach - Ability to Pay Approach - Neutrality Approach - Laffer Curve-Taxable capacity. Public Expenditure - Wagner's Law - Peacock - Wiseman Hypothesis - Criteria for Public Investment - Social Cost - Benefit Analysis - Budget Classification - Programming Budget - Zero - Based Budgeting. Public Debt - Burden Controversy - Debt Management - Redemption of Public Debt- Public Debt and third World Countries. Federal Finance and Development Finance - Principles of Federal Finance - Centre- State Financial Relations – Source of income and expenditure of the Central and State Governments- problems in resource mobilization by the state. Finance Commissions in India - Devolution of Resources and Grants - Functional Finance – Latest Finance Commission – Main recommendations - Deficit Financing objectives, justification – Causes of Deficit Financing. Pricing Policy in Public Enterprises - Disinvestment and Privatisation of Public Enterprises -Recent trends in the functioning of Private Sector in India – Policy Changes – Socio - Economic Implications. Fiscal Policy - Objectives of Fiscal Policy - Interdependence between Monetary and Fiscal Policies - Alternative Measures for Resource Mobilization - their Impact on Growth & Distribution - Balanced Budget Multiplier. Indian Public Finance - salient features of Indian Tax system - Trends in Indian Tax Revenues - Revenues of the Union, State and Local Bodies - Non- Tax Revenues, Tax Buoyancy and Elasticity –GST Pattern of Expenditure & Debt in India - Tax and Expenditure Reforms - Major Recommendations of the committees.

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