



## **Syllabus for Economics**

## Senior Secondary School Economics (XI - XII)

### Statistics

**Basic Concepts** – Definition and features of Statistics, Statistical inference, Statistics in economics, Importance of statistics, Shortcomings of Statistics

**Collection of data** - Sources of data (primary and secondary), Questionnaire, Characteristics of a Good Questionnaire, Mode of data collection, Census And Sample Surveys, Types of Sampling, Sampling and Non-Sampling Errors, Important sources of secondary data, Census of India and NSSO

**Organisation of Data**- Raw Data, Types of Data Classification, Meaning and types of variables; Features and shortcomings of Frequency Distribution, Preparation of Frequency Distribution, Preparation of Frequency array, Bivariate Frequency distribution

**Presentation of Data** – Textual Presentation of data, Preparation and Interpretation of Tabular and Diagrammatic Presentation of Data, Parts of a table, Basis of data classification, Geometric forms (bar diagrams and pie diagrams), Frequency diagrams (histogram, polygon, and Ogive), Arithmetic line graphs (time series graph)

**Measures of Central Tendency** - Measures of Central Tendency (Mean, Median, and Mode), Calculation of Percentiles and Quartiles, Calculation of Measures of Central Tendencies for grouped and ungrouped data, Calculation of Mean using Assumed Mean method as well as Step deviation Method, Properties of Arithmetic Mean, Weighted Arithmetic Mean, Relative position of Arithmetic Mean, Median and Mode

**Measures of Dispersion** – Calculation of measures of absolute dispersion (range, quartile deviation, mean deviation, and standard deviation), Calculation of measures of absolute dispersion relative dispersion (co-efficient of range, co-efficient of quartile-deviation, co-efficient of mean deviation, and coefficient of variation), Features, construction, and interpretation of Lorenz Curve, Features and Limitations of Measures of dispersion

**Correlation** – Types of the relationship between data, Meaning and properties of the correlation coefficient, Scatter diagram, Types of correlation, Calculation of correlation coefficient (Karl Pearson's method and Spearman's rank correlation), Properties of both measures of correlation, Correlation vs causality

**Index Numbers** - Meaning and features of Index numbers, Types of Indices based on the construction method, Features of Major Indices (Laspeyre's price index, Paasche's price index, CPI, WPI, Agricultural Production index, Stock Market Indices, HDI), Shortcomings of Index Numbers, Secondary Sources of Major Index Numbers used in Economics

## Microeconomics

**Basic Concepts** – Economics and its importance, Market participants, Economic Activities, Consumption, Production and Distribution, Features of Simple Economy, Central problems of an economy, Production Possibility Frontier, Organisation of economic activities, Types of Economic Systems (Market, Centrally Planned and Mixed), Positive and normative economics, Microeconomics vs Macroeconomics

**Consumer Behaviour** – Properties of Utility and Marginal Utility, Conditions of consumer's equilibrium using marginal utility analysis, Concept and determination of consumer's Budget, Budget Set, Budget Line, Preferences of the consumer, Monotonic Preferences, Substitution between Goods, Diminishing Rate of Substitution, Indifference Curve, Marginal rate of substitution (MRS), Indifference Map, Concept of Demand and Market demand, determinants of demand, demand schedule, demand curve and its slope, Normal and Inferior Goods, Substitutes and Complements, Change in demand, Shifts in the Demand Curve, Movements along the Demand Curve, Price elasticity of demand, Factors affecting price elasticity of demand; Measurement of price elasticity of demand, Elasticity along a Linear Demand Curve, Relationship between Elasticity and Expenditure

**Producer Behaviour and Supply** – Product market vs factor market, Concept of Production Function (Short run and long run), Isoquant, Total Product (TP), Average Product, Marginal Product, Returns to a factor, Law of diminishing marginal product, Law of variable proportions, Returns to scale, Costs, Short Run Costs, Long Run Costs, Relationships among different costs, Opportunity cost, Cobb-Douglas Production Function, Forward linkage, Meaning and relationship among various measures of Revenue (Total, Average and Marginal revenue), Producer's equilibrium and its conditions in terms of marginal revenue and marginal cost, The Shutdown Point, The Normal Profit and Break-even Point, Profit maximisation, Concept of Supply and market supply, Determinants of the supply curve, Supply Schedule, Supply Curve and its slope (Long-run and Short-run), Movements along and shifts in the supply curve, Price elasticity of supply; measurement of price elasticity of supply

**Perfect competition** – Features of Perfect Competition, Condition of Market Equilibrium, Excess demand/excess supply, Wage Determination in Labour Market, Shifts in Demand and Supply, Price Ceiling, Price Floor, Impact of Free Entry and Exit on Market Equilibrium

**Non-competitive Markets** – Types of the non-competitive market and their features (Monopoly, Monopolistic and oligopoly), Determination of price in non-competitive markets, Characteristics of Cost and Revenue in non-competitive markets

**Externalities** - Positive and Negative Externalities, Private costs and benefits, Social costs and benefits, Market failures and their impact, Public Goods and their characteristics

## Macroeconomics

**National Income and Related Aggregates** – Concept and Features of Macroeconomics, Types of goods (consumption goods, capital goods, final goods, intermediate goods), Stocks vs Flows

concept, Gross investment and Depreciation, Circular flow of income (two-sector model), Methods of calculating National Income (Value Added method, Expenditure method, and Income method), Aggregates related to National Income (GNP, NNP, GDP and NDP - at market price and at factor cost), Real and Nominal GDP, GDP Deflator, GDP and Welfare

**Money and Banking** - Meaning and supply of money, Functions of Money, Demand for money, Legal Definitions of money, Money creation by the banking system, The Currency Deposit Ratio, The Reserve Deposit Ratio, Cash Reserve Ratio, Statutory Liquidity Ratio, Bank Rate, Commercial Banks, High Powered Money, Central bank and its functions (example of the Reserve Bank of India), Open Market Operations, Bank Rate Policy, Varying Reserve Requirements, Sterilisation by RBI

**Determination of Income and Employment** - c Ex Ante vs Ex Post, Aggregate demand and its components, Propensity to consume and propensity to save (average and marginal), Short-run equilibrium output, Movement along a curve versus a shift of a curve, Investment multiplier and its mechanism, Meaning of full employment and involuntary unemployment, Problems of excess and deficient demand, Measures to correct them (changes in government spending, taxes and money supply), Paradox of Thrift, Properties of Inflation

**Government Budget and the Economy** – Characteristics of Public goods, Functions of Government, Public Production vs Provision, Meaning, objectives and components of Government Budget, Classification of receipts (revenue and capital receipts), Classification of expenditure (revenue and capital expenditure, Plan and non-plan expenditure), Measures of government deficit (revenue deficit, fiscal deficit, primary deficit), Fiscal Policy, Changes in Government Expenditure, Changes in Taxes, Discretionary fiscal policy, Transfers, Debt, Ricardian equivalence, Deficit Reduction, Phillips Curve

**Open Economy** – Meaning and Features of The Balance of Payments, Meaning and components of Balance of payment Account, Balance of Trade, Balance of Payments deficit, Foreign exchange rate, Fixed vs flexible rates, Managed floating, Determination of exchange rate in a free market, Purchasing power parity, NEER vs REER, Interest Rates and the Exchange Rate, Income and the Exchange Rate, Exchange Rates in the Long Run, Exchange Rate Systems, National Income Identity in case of Open Economy, Equilibrium Output and the Trade Balance, WTO and its Role, World Bank and its Role, IMF and its role

## Economic Theories and Practices

**Economic Development** - Economic Growth vs Economic Development, Measures of economic growth and economic development, Shortcomings of Economic Growth, Meaning and features of Human Development Index

**Economic Reforms**– Factors leading to economic reforms, Features and appraisals of Liberalisation, Globalisation and Privatisation; Concepts of demonetization and GST, Criticism of new policies, UN and its role

## **Current Challenges in Developing Economies -**

**Poverty-** Absolute vs relative Poverty, Poverty Line, Causes of poverty, Major Global Poverty Alleviation Programmes and Policies

**Human Capital Formation** – Concept of People as Resource; Role of human capital in economic development, Sources of Human capital, Concept of Human development, Ways of Human Capital Formation, Role of Gender, UNICEF and its role

**Rural development** - Issues of Credit and Marketing, Role of cooperatives, Agricultural diversification, Alternative farming (organic farming)

**Employment-** Formal and informal sectors, Self-employed vs Hired workers, Factors leading to Unemployment, Meaning and Types of Unemployment, Major policies for employment generation

**Infrastructure-** Meaning, Importance and Role of Infrastructure, Types of Infrastructure, Energy and its Sources, Public vs Private Health Infrastructure, Infant Mortality Rate, Morbidity Rate, WHO and its role

**Sustainable Economic Development-** Meaning and Functions of Environment, Effects of Economic Development on Resources and Environment, Pollution and its effects, Global warming, Meaning and features of Sustainable Development, Strategies for Sustainable Development