

# DEPARTMENT OF ECONOMICS

## **PROGRAMME OUTCOME**

1. To provide students a well-founded education in Economics;
2. To provide structured curricula which support the academic development of students;
3. To provide and adapt curricula that prepare our graduates for employment and further study as economists;
4. To provide the students with the opportunity to pursue courses that emphasize quantitative and theoretical aspects of Economics;
5. To provide students with the opportunity to focus on applied and policy issues in Economics;
6. To provide programmes that allow the students to choose from a wide range of economic specialization;
7. To provide a well-resourced learning environment for Economics.
8. To understand how different degrees of competition in a market affect pricing and output.
9. To understand the efficiency and equity implications of market interference, including government policy.
10. To develop research knowledge in economics.
11. To develop the skill of data collection & use of sampling techniques in research.
12. To develop the knowledge about theories of economic growth & Development and issues of economic planning.
13. To create awareness about changing macro-economic policies and theories.

## Programme Specific outcome

This course is designed

1. To expose the students to the basic principles of micro economic theory.
2. To provide knowledge on applications of mathematical methods in economics.
3. To transmit the body of basic mathematics that enables the study of economic theory, specifically the courses on Micro Economics, Macro Economics, Statistics and Econometrics.
4. To introduce the students to the basic concepts of Macro Economics.
5. To provide a sound training in micro economic theory to formally analyse the behaviour of individual agents.
6. To discuss various alternative theories of output and employment determination in a closed economy.
7. To discuss various theoretical issues related to an open economy.
8. To provide some basic concepts and terminology that are fundamental to statistical analysis and inference.
9. To discuss the study and measure of relationship between variables, which are the core of economic analysis.
10. This paper also includes a basic discussion index number and time series.
11. To develop the notion of probability, random variable and the most frequently used theoretical distribution, Normal Distribution.
12. To provide a sound training in micro economic theory to formally analyse the behaviour of competitive firms, general equilibrium and welfare, imperfect markets and topics under information economics.
13. To deal with the nature of government intervention and its implications for allocation, distribution and stabilization.
14. To involve a formal analysis of government taxation and expenditures, public goods, market failures and externalities.
15. To discuss major trends in economic indicators and policy debates in India in the post-Independence period, with particular emphasis on paradigm shifts and turning points.

16. To discuss alternative conceptions of development and their justification and the models of growth and cross-national comparisons of the growth experience that can help to evaluate these models.
17. The students about the significance of agriculture in the Indian economy and helps to understand the role agriculture in economic development.
18. To develop insights into changing agricultural practices in India and to assess the significance of agriculture in the era of liberalisation.
19. To investigate the place of the Indian economy in the wider colonial context, and the mechanisms that linked economic development in India to the compulsions of colonial rule.
20. To reviews major trends in economic indicators and policy debates in Odisha in pre- and post-Independence period and to analyse the problem and prospects of primary, Secondary, Tertiary sector of Odisha.
21. To introducing the students about the basic concepts used in research to scientific social research methods and their approach.

## **Course Outcome**

### **Introductory Micro Economics (Core-1)**

This course will help the students to access knowledge on the followings:

1. Exploring the subject matter of economics.
2. The ten principles of Economics
3. The scientific method and observation
4. The role of assumptions and the Economic model
5. Basic concepts of microeconomics such as demand and supply and elasticity etc.
6. Concepts of consumer surplus, producer surplus, market efficiency and market failure.
7. Concepts of consumer behaviour like cardinal utility and ordinal utility analysis.
8. Application of Indifference curve analysis in deriving demand curves, price effect, income effect and substitution effect.
9. Theory of production- iso-quants, laws of returns to scale, law of variable proportion.
10. Traditional theory of cost.

11. The firm and market structure: Competitive market and monopoly.
12. The input market: the demand for labour, supply of labour, trade-off between work and leisure.

## **Mathematical Methods for Economics (Core-2)**

This paper will provide knowledge on applications of mathematical methods in economics such as

1. Set and set operations.
2. Relations. Functions and Number systems.
3. Functions of one real variable.
4. Limit and continuity of functions & limit theorems.
5. Derivative of a function of one variable.
6. Application of simple differentiation in Economics.
7. Partial differentiation techniques, Geometric interpretation.
8. Application of Partial differentiation in Economics.
9. Elements of matrix algebra, Transpose, inverse, rank etc.
10. Concept of Determinants, its properties and applications in Economics.

## **Introductory Macro Economics (Core-3)**

This course will help the students to access knowledge on the followings:

1. Basic concepts of Macro Economics
2. Concepts and Methods of National income accounting.
3. Measurement of Macro Economic variables.
4. Circular flow, National Income and Economic Welfare, and Green accounting.
5. Evolution and Functions of Money, and Theories of Money.
6. Value of Money and index number of prices.
7. Inflation, Deflation, Depression and Stagflation.

8. Theory of determination of income and Employment.
9. Theory of Effective Demand and Concepts of Multipliers.

## **Mathematical Methods for Economics-II (Core-4)**

This paper will provide knowledge on applications of mathematical methods in economics such as

1. Basic concepts and structure of input-output Model.
2. Solution of equilibrium output in three sector model.
3. Second and higher order derivatives.
4. Application of second order differentiation and curvature of a function.
5. Differentials and total derivatives, and Derivatives of implicit functions.
6. Rules and techniques of Integration.
7. Definite integral and its applications.
8. Single and multivariable optimisation.
9. Economic application of Multivariable optimisation.
10. Optimisation with equality constraints.
11. Lagrange multiplier method and border-Hessian determinants.

## **Micro Economics-I (core-5)**

This course will help the students to access knowledge on the followings:

1. Concepts of consumer behaviour like cardinal utility and ordinal utility analysis.
2. Theory of Indifference curve, Budget line and Consumer Equilibrium.
3. Construction of Model, Optimisation and Equilibrium.
4. Income, price and substitution effects.
5. Compensated demand curve, Consumer surplus and Producer Surplus.
6. Production with one variable input (Law of variable Proportion) and with two variable inputs (Law of Return to scale).

7. CD, CES, Linear and Fixed Proportion Production Function.
8. Short run and long run cost functions.
9. Profit maximisation of Competitive Firm.
10. Profit function and its Properties.

## **Macro Economics-I (core-6)**

This course will help the students to access knowledge on the followings:

1. Theories of Consumption Function.
2. Theories of Investment Functions.
3. Types of investments, MEC and MEI.
4. Theories of Demand for Money: Classical, Neoclassical and Keynesian approach.
5. Theories money supply determination and money multiplier.
6. Analysis of Aggregate demand and Aggregate supply.
7. Is-LM curve and their implication for equilibrium.
8. Inflation- Unemployment trade-off and the Phillips curve.
9. Characteristics and theories of Trade Cycle.

## **Statistical Methods for Economics (core-7)**

This course will help the students to access knowledge on the followings:

1. Basic concepts of statistics, methods of data collection.
2. Presentation of data: Frequency distribution, Graph and Diagram.
3. Methods of central tendency and dispersion.
4. Measures of skewness and kurtosis.
5. Correlation analysis: Karl Pearson and Spearman Rank Correlation.
6. Regression Analysis: Two variable linear regression and standard error.
7. Time Series analysis: Component and Measurement.
8. Analysis of Index Number.

9. Analysis of Probability and Random Variable.
10. Theory of Sampling.

## **Micro Economics-II (core-8)**

This course will help the students to access knowledge on the followings:

1. Firms supply and Equilibrium: Supply decision of a competitive firm and Exceptions; Profits and Producer's Surplus; Long Run Supply Curve of a Firm.
2. Short Run and Long Run Industry Supply; Industry Equilibrium in Short and Long Run; Meaning of Zero Profits; Economic Rent.
3. General equilibrium, efficiency and welfare.
4. Theorems and their implications; The Firm: Production and the Welfare Theorems.
5. Monopoly: Barriers to Entry, Profit Maximization and Output Choice, Monopoly and resource Allocation, Monopoly, Product Quality and Durability.
6. Price Discrimination, Second Degree Price Discrimination through Price Schedules, Regulation of Monopoly.
7. Oligopoly – Choosing a strategy; Quantity leadership – Problems of the follower and the leader; Price leadership.
8. Simultaneous Quantity Setting; Example of Cournot Equilibrium; Simultaneous Price Setting; Collusion.
9. Game Theory the Payoff Matrix of a Game; Nash Equilibrium; Mixed Strategies; The Prisoner's Dilemma.

## **Macro Economics-II (core-9)**

This course will help the students to access knowledge on the followings:

1. Features of Financial Markets, Functions of Financial Markets, Banks and Financial Markets.
2. Financial Repression and Major Financial Sector Reforms in India.
3. Open Economy Macroeconomics Balance of payments- Concept, Equilibrium and Disequilibrium, Measures to Correct Disequilibrium.

4. Determination of Foreign Exchange Rate- the PPP Theory and its Implications, The Short-run open economy Model, the basic Mundell-Fleming Model.
5. Modelling Economic Growth, The Basic Harrod- Domar Model, Joan Robinson and the Golden Rule of Capital Accumulation.
6. The Basic Solow Model, Theory of Endogenous Growth – the Rudimentary A-K Model.
7. Macroeconomic Policy: The Goals of Macroeconomic Policy and of Policy Makers, The Budget and Automatic Fiscal Stabilisers.
8. Fiscal Policy: Objectives and Limits to Discretionary Policy, The Crowding –Out Meaning, Scope and Objectives of Monetary Policy, Instruments of Monetary Policy, the Transmission Mechanism of Monetary Policy.
9. Schools of Macroeconomic Thought and the Fundamentals of Macroeconomic Theory and Policy.

## **Research Methodology (core-10)**

This paper explores the ideas about

1. Meaning, Objectives, Motivation, Types, Approaches and Significance of Research.
2. Criteria of Good Research; Qualities of a Good Researcher, Research as a Career.
3. Research Problem, Selecting the Problem, Necessity of Defining the Problem.
4. Technique Involved in Defining a Problem; Research Design: Meaning, Need, Features of a Good Design.
5. Measurement in Research, Measurement Scales, Sources of Error in Measurement.
6. Tests of Sound Measurement, Techniques of Measurement Tools, Scaling and Important Scaling Technique.
7. Research Ethics: codes and ethics, permissions to research, responsibilities, confidentiality, feedback.
8. Research Proposal and literature review and plagiarism.
9. English in report writing: words, sentences, paragraph, writing style.
10. Evaluation checklists, persistence; Common Citation Styles.

## **INDIAN ECONOMY I (Core-11)**

This paper explores the ideas about

1. Indian Economy in the Pre-British Period; The Structure and Organisation of Villages and Towns.
2. Industries and Handicrafts in Pre-British India; Colonialism; Economic Consequences of British Rule.
3. The Land System and Commercialisation of Agriculture; Industrial Transition; Colonial Exploitation and Impacts.
4. Colonisation and Modernisation; State Policies and Economic Underdevelopment.
5. Population Growth and Economic Development – size, growth and future of population; Causes of rapid population growth; Population and economic development.
6. Population policy; Demographic issues – Sex and Age Composition of population; Demographic Dividend.
7. Human Resource Development – Indicators and importance of Human Resource Development.
8. Trends in national and per capita income; Changes in sectoral composition of national income.
9. Regional disparities in Growth and Income; Savings and Investment.
10. Rationale, Features, Objectives, Strategies, Achievements and Assessment of Planning in India.
11. Eleventh Five Year Plan – Objectives, Targets and Achievements; Twelfth Five Year Plan – Vision and Strategy.
12. Poverty – Estimation and Trends, Poverty Alleviation Programs – MGNREGA, NRLM, SJSRY.
13. Inequality – Measures and trends in India.
14. Unemployment – Nature, Estimates, Trends, Causes and Employment Policy.

## **DEVELOPMENT ECONOMICS I (Core-12)**

This paper explores the ideas about

1. Economic growth and economic development; characteristics of underdeveloped countries.
2. Vicious cycle of poverty and cumulative causation; obstacles to economic development; measures of economic development.

3. National and per capita income, basic needs approach, capabilities approach.
4. Three core values of development, PQLI, HDI, HPI, MDPI, GDI; capital formation and economic development.
5. Theories of Economic Growth and Development- Classical theory, Marxian theory; Schumpeterian theory; Rostow's stages of economic growth; Solow model.
6. Concepts of poverty and inequality; Measuring poverty; Measuring Inequality – Lorenz curve and Kuznets' inverted U hypothesis.
7. Growth, poverty and inequality; Economic characteristics of poverty groups (rural poverty, women and poverty, indigenous population and poverty).
8. Role of institutions in economic development; Characteristics of good institutions and quality of institutions.
9. The role of democracy in economic development; Role of state; Role of markets and market failure.
10. Corruption and economic development – tackling the problem of corruption.
11. Role of agriculture; Transforming traditional agriculture; Barriers to agricultural development.
12. Role of industrialization; Interdependence between agriculture and industries – A model of complementarities between agriculture and industry.

## **INDIAN ECONOMY II (CORE-13)**

This paper explores idea about

1. Nature, importance, trends in Indian agricultural production and productivity.
2. Factors determining production, land reforms, new agricultural strategies and green revolution.
3. Rural credit; Agricultural marketing and warehousing.
4. Trends in industrial output and productivities; Industrial Policies of 1948, 1956, 1977 and 1991.
5. Industrial Licensing Policies – MRTP Act, FERA and FEMA.

6. Growth and problems of SSI, Industrial sickness; Industrial finance; Industrial labour.
7. Tertiary Sector: growth and contribution of service sector to GDP of India.
8. Share of services in employment; Human development – concept, evolution, measurement, HRD.
9. Indian educational policy; Health and Nutrition.
10. Foreign Trade: role, composition and direction of India's foreign trade.
11. Trends of export and import in India, export promotion versus import substitution.
12. Balance of Payments of India; India's Trade Policies; Foreign Capital – FDI, Aid and MNCs.

## **DEVELOPMENT OF ECONOMICS II (CORE-14)**

This paper explores the ideas about

1. The demographic concept like birth and death rates, age structure, fertility and its determinants.
2. Different theories on population like Malthus theory of population growth, Theory Optimum population.
3. The negative consequence of population growth and theory on migration.
4. Dualism and its different types like social dualism, technological dualism and geographical dualism etc.
5. The economic inequalities, the inverted U relationship, international inequalities.
6. The center periphery thesis, exploitation and unequal exchange, the dualistic development thesis.
7. Basic issues of environment and development.
8. Simple model of environment and economic activity, environmental degradation and externalities, common property resources.
9. Public goods and free-rider problem, renewable and non-renewable resources.
10. Financial inclusion and economic development, taxation, public borrowing and economic development.
11. Investment and aid controversies and opportunities,

12. Globalization, international trade and economic development.
13. The Prebisch Singer Hypothesis.

## **Economic History of India 1857-1947 (DSE-1)**

This course will help the students to access knowledge on the followings:

1. Colonial India: Background and Introduction, Overview of colonial economy.
2. Macro Trends of National Income; population and occupational structure.
3. Agriculture during British rule: Agrarian structure and land relations.
4. Agricultural markets and institutions – credit, commerce and technology; trends in performance and productivity; famines.
5. Railways; the de-industrialisation debate; evolution of entrepreneurial and industrial structure.
6. Nature of industrialisation in the interwar period; constraints to industrial breakthrough; labour relations.
7. The imperial priorities and the Indian economy; drain of wealth; international trade.
8. Capital flows and the colonial economy – changes and continuities; government and fiscal policy.

## **Odisha Economy (DSE-2)**

This course will help the students to access knowledge on the followings:

1. Odisha Economy before 1947, Orissa's Economy in the Nineteenth Century: Benevolence or Exploitation, Forces of Nature, Animal Power, The Company Steps in, Public Works and Public Health, Education, Disintegration of Village Economy.
2. The Borrowers, Money-flows from Village to Metropolis, Pauperization of Peasantry, The Wage Earners, Demographic Changes.

3. A macro glance of Odisha economy: aggregate income, broad sectoral decomposition, performance of districts, employment, child labour and bonded labour.
4. Employment programmes, consumption expenditure, cost of living; Odisha State public finances.
5. Agriculture Sector Development in Odisha, Agriculture: land ownership and land tenure, agricultural wages and rural unemployment.
6. Production and productivity of major crops, agricultural inputs, agricultural policy; Animal Husbandry; Fisheries.
7. Industry: Investment, industrial policy, and the growth of large industries, mining and quarrying.
8. Construction; tertiary sector: tourism, transport and power; Water Resources, Forest Resources.
9. Social Sector in Odisha, Poverty: income poverty and inequality; health sector: outcomes, infrastructure, finance, public health, NRHM.
10. Education: Literacy, Primary education, secondary education, higher education, SSA; human development.

### **Economics of Agriculture (DSE-3)**

This paper explores the ideas about

1. Role of Agriculture in Economic Development, Economic growth – sectoral changes and agriculture.
2. Inter-linkages between agriculture and industry; empirical evidence of inter-dependence between agriculture and industry.
3. Mechanization of Indian Agriculture, Case for and against farm mechanization.
4. Green revolution and trends of mechanization in India.
5. Agricultural price policy for a developing economy – objectives and effectiveness of agricultural price policy, features of an ideal agricultural price policy.

6. Agricultural price policy in India and public distribution system.
7. Agricultural marketing – need and criteria for assessing efficiency, agricultural marketing system in India, development of a national agricultural marketing platform.
8. Rural credit in India, importance and estimates, agencies for rural credit, review of progress of institutional finance in rural India since independence.
9. WTO and India's trade in agricultural commodities.
10. Agriculture in Indian Planning, Globalization and Indian agriculture.

## **Project (DSE-4)**

This paper explores the ideas about

11. Meaning, Objectives, Motivation, Types, Approaches and Significance of Research.
12. Criteria of Good Research; Qualities of a Good Researcher, Research as a Career.
13. Research Problem, Selecting the Problem, Necessity of Defining the Problem.
14. Technique Involved in Defining a Problem; Research Design: Meaning, Need, Features of a Good Design.
15. Measurement in Research, Measurement Scales, Sources of Error in Measurement.
16. Tests of Sound Measurement, Techniques of Measurement Tools, Scaling and Important Scaling Technique.
17. Research Ethics: codes and ethics, permissions to research, responsibilities, confidentiality, feedback.
18. Research Proposal and literature review and plagiarism.
19. English in report writing: words, sentences, paragraph, writing style.
20. Evaluation checklists, persistence; Common Citation Styles.