

#### Introduction to the Masters in Economics Program

Welcome to the Masters in Economics Program at the University of Kashmir, a premier academic journey designed to cultivate profound economic expertise and empower the next generation of economists with the skills necessary to address complex economic challenges. With a strong focus on both theoretical knowledge and practical skills, the program is tailored to enhance employability of the students.

#### **Program Objectives:**

Our program is committed to achieve following objectives:

- Economic Expertise: We aim to develop students with a thorough understanding of economic theories and principles, enabling them to analyze and provide solutions to complex economic issues.
- **Policy Analysis and Formulation:** We focus on enhancing students' quantitative and analytical abilities, enabling them to use economic modeling and statistical tools to assess economic policies and formulate evidence-based recommendations for local, regional, and national economic challenges.
- **Regional Focus:** Our program specializes in regional economic development, with a particular emphasis on developing an understanding of socioeconomic dynamics, emphasizing strategies for inclusive growth, poverty reduction, and employment generation in Jammu and Kashmir, addressing the unique economic needs and opportunities of the region.
- Data Analysis and Research: We provide hands-on experience in economic data analysis and research methodologies, preparing students to conduct empirical research in diverse economic contexts and to communicate economic findings and policy recommendations clearly to stakeholders, including government agencies, businesses, and local communities.
- Ethical and Sustainable Economics: Our program promotes ethical considerations in economic decision-making and encourages sustainable practices that align with the environmental and social needs of the region.
- Entrepreneurship and Innovation: We encourage an entrepreneurial mindset among students, fostering innovation and the ability to identify and capitalize on economic opportunities.

#### **Program Outcomes:**

Graduates of the Masters in Economics Program will emerge as market ready, well-rounded economists with a deep understanding of economic theories and a strong ability to apply this knowledge in real-world settings. To this end the program outcomes are designed to ensure that students:

- **Apply Economic Theory**: Demonstrate the ability to explain and apply core economic models and theoretical frameworks to analyze practical economic problems and policy issues.
- **Conduct Empirical Research**: Design and execute independent economic research projects using statistical software (e.g., STATA, R) and econometric methods; interpret and present findings clearly.
- **Pursue Academic and Policy Roles**: Exhibit readiness for academic writing, policy analysis, and entrance into doctoral programs or professional roles through completion of dissertations, policy briefs, or internships.
- **Support Evidence-Based Decision-Making**: Critically evaluate economic data and policy options to provide evidence-based recommendations in academic, public, or private sector contexts.

#### Join us in shaping the future of economics and making a meaningful impact on the world.

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## **Important Instructions**

- 1. The P.G. Programme in Economics comprises 4 Semesters spread over two academic sessions with a credit weightage of 96.
- 2. The student shall have to earn a total of 56 credits from the Core (CR) papers and 32 credits from Discipline Centric Electives (DCE) and 08 credits from Generic Electives (GE / Open Electives (OE) in all four semesters.

#### **Classification of Papers:**

**CORE:** Compulsory Papers

**Discipline Centric Electives (DCE):** Optional Papers offered by the Department concerned.

I

**Generic Electives (GE):** Optional in nature to be opted from the courses offered by allied departments within the school concerned.

**Open Electives:** Optional in nature to be opted from the courses offered by anydepartment within the University.

## **Course Structure**

Course Code	Course Title	Туре	Contact Hours/Week	Tutorials Per Week	Credits
ECO 22101CR	First S	Semester Core	3	1	4
ECO 22101CR	Macroeconomics - I		3	1	4
ECO 22102CR ECO 22103CR	Macroeconomics - 1 Mathematics for Economics	Core	3	-	-
		Core	-	1	4
ECO 22104DCE	Statistical Methods	DCE	3	1	4
ECO 22105DCE	Financial Institutions and Markets	DCE	3	1	4
ECO 22106DCE	Industrial Economics	DCE	3	1	4
ECO 22107DCE	Economics of Education and Health	DCE	3	1	4
ECO 22001OE	Basic Microeconomics	OE	2	0	2
ECO 22001GE	Planning and Development	GE	2	0	2
ECO 22201CR	Second Microeconomics - II	Semester	2	1	4
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ECO 22202CR		Core	3	1	4
ECO 22203CR	History of Economic Thought	Core	3	1	4
ECO 22204CR	International Trade	Core	3	1	4
ECO 22205DCE	Basic Econometrics	DCE	3	1	4
ECO 22206DCE	Monetary Economics	DCE	3	1	4
ECO 22207DCE	Agricultural Economics	DCE	3	1	4
ECO 22208DCE	Labour Economics	DCE	3	1	4
ECO 22002OE	Basic Macroeconomics	OE	2	0	2
ECO 22002GE	Industrial Organization	GE	2	0	2
ECO 22301CR		Semester	2	1	4
ECO 22301CR ECO 22302CR	Economics of Development	Core	3	-	-
	Indian Economic Development	Core	3	1	4
ECO 22303CR	International Finance	Core	3	1	4
ECO 22304DCE ECO 22305DCE	Advanced Econometrics   Economics of Conflict, Peace and	DCE	3	1	4 4
	Development	DCE	3	I	
ECO 22306DCE	J & K Economy	DCE	3	1	4
ECO 22307DCE	Demography	DCE	3	1	4
ECO22003OE	Financial Markets	OE	2	0	2
ECO22003GE	International Economics	GE	2	0	2
		Semester	•		
ECO 22401CR	Economics of Growth	Core	3	1	4
ECO 22402CR	Public Economics	Core	3	1	4
ECO 22403CR	Environmental Economics	Core	3	1	4
ECO 22404CR	Issues in Indian Economy	Core	3	1	4
ECO 22405DCE	Research Methodology	DCE	3	1	4
ECO 22406DCE	Indian Financial System	DCE	3	1	4
ECO 22407DCE	Economics of Tourism	DCE	3	1	4
ECO 22408DCE	Gender and Development	DCE	3	1	4
ECO 22409DCE	Project Work	DCE	4	0	4
ECO22004OE	Banking and Finance in India	OE	2	0	2
ECO22004GE	Public Finance	GE	2	0	2

#### SEMESTER – I Microeconomics – I Course Code: ECO22101CR

**Course Description**: The course analyses the economic behaviour of individuals, firms and markets. It provides a comprehensive understanding to various aspects of consumer behaviourand demand analysis. Production theory and behaviour of costs, the theory of traditional markets and equilibrium of firm in modern profit and non-profit maximizing frameworks is also dealt with in this course.

**Course Objective**: To provide students with a thorough knowledge and understanding of the foundations of modern economic analysis.

#### **Course Outcome:**

- 1. Understand the fundamental principles of microeconomics and its application to real-world economic problems.
- 2. Analyze consumer behavior and producer decisions using utility and cost theory.
- 3. Evaluate market structures, including perfect competition, monopoly, and oligopoly, and their implications for resource allocation.

#### Unit I: Consumer Behaviour – I

Theory of consumer: preference relation and their properties; consumption decision – utility maximisation and expenditure minimisation (interior and corner solution); derivation of demand function; Slutsky equation, demand elasticity.

#### Unit II: Consumer Behaviour – II

Indirect utility function, duality theorems, utility – expenditure duality; welfare evaluation; consumer surplus; equivalent variation and compensating variation; revealed preference (weakand strong axioms).

#### **Unit III: Theory of Production & Costs**

Production function; returns to factor and scale; Cobb-Douglas and CES production functions and their properties; technical progress; short run and long run costs- traditional and modern approach; profit maximisation and cost minimisation-input demand; supply function, hoteling lemma; envelope theorem.

#### **Unit IV: Market Structure**

Competitive markets – demand and supply analysis; short-run versus long-run; competitive market equilibrium; monopoly- market equilibrium; price discrimination – first, second and third degree; monopolistic market equilibrium.

#### **Basic Reading List:**

- Gravelle, H and Ray Rees. (2004). Microeconomics (3<sup>rd</sup> ed.). Pristine Hall Longman: London.
- 2. Varian, H. R. (2010). Intermediate Microeconomics A Modern Approach. EWP and WW Norton and Co, Inc.: New York.
- 3. Whinston M. and Green. (1995). Microeconomic Theory. Oxford University Press: USA.
- 4. Koutsoyiannis, A. (2000). Modern Microeconomics (2<sup>nd</sup> ed.). Macmillan Press: London.
- 5. Perloff, J. M. (2014). Microeconomics: Theory and Applications with Calculus. United Kingdom: Pearson.
- 6. Henderson & et. al. (1980). Microeconomic Theory: A Mathematical Approach. McGraw-Hill: Japan.

#### Macroeconomics – I

#### Course Code: ECO22102CR

**Course Description:** This course lays foundations for understanding the dynamics of consumption and investment under alternative macroeconomic paradigms. It exposes students to the foundations of theories like demand for money, output and employment under different schools of thought.

**Course Objective:** To acquaint students to theories of macroeconomics and make them understand the importance of economic policies to check business cycles, inflation and employment.

#### **Course Outcome:**

- 1. Comprehend the concepts of national income, output, and economic growth.
- 2. Analyze the determinants of aggregate demand and supply in an economy.
- 3. Assess the role of government policies, such as fiscal and monetary policy, in stabilizing the economy.

#### **Unit I: Sectoral Demand Functions**

Consumption-background and cross-sectional budget studies, intertemporal constraints and preferences- Irvin Fisher model, consumption smoothing; permanent income hypothesis; relative income approach; role of liquidity constraint; interest rate and savings. MEC and investment; profit maximization and capital stock; adjustment costs and investment decisions; residential and inventory investment; irreversibility and investment.

#### **Unit II: Demand for Money**

Classical approach to demand for money; Keynes liquidity preference approach; regressive expectation model; portfolio balance approach; transaction/inventory demand for money; seigniorage – the optimal level of seigniorage.

#### Unit III: Theory of Output and Employment - I

Employment and output determination – classical production function and demand for labour; supply of labour-consumption- leisure choice; Say's law – weak and strong version; quantity theory of money; classical dichotomy; Fisher effect; aggregate supply under perfect wage - price flexibility and perfect foresight hypothesis.

#### Unit IV: Theory of Output and Employment - II

Keynesian view of labour market; theory of aggregate effective demand; neoclassical labour market equilibrium; aggregate supply under imperfect information and rigidities; Friedman's theory of natural rate of unemployment and output; Philips curve - Keynesian version; Walrasian and Keynesian adjustment mechanism.

#### **Basic Reading List:**

- 1. Branson, W. H. (2005). Macroeconomic Theory and Policy. Harper & Row: New York
- Rosalind Levacic and Alexander Rebmann. (1982). Macroeconomics: An Introduction to Keynesian – Neoclassical Controversies (2<sup>nd</sup> ed.). Macmillan Education Limited: London.
- 3. Errol D'Souza. (2009). Macroeconomics (2<sup>nd</sup> ed.). Pearson Publication: India.
- 4. Tysome, P. J., Pierce, D. G. (2014). Monetary Economics: Theories, Evidence andPolicy. United Kingdom: Elsevier Science.
- 5. Froyen, R. T. (2013). Macro Economics: Theories and Policies. Pearson Education: USA.
- 6. Romer, D. L. (2011). Advanced Macroeconomics. McGraw Hill Company Ltd.: New York.
- 7. Snowdon, B., Vane, H. R. (2005). Modern Macroeconomics: Its Origins, Development and Current State. United Kingdom: Edward Elgar Publishing.

**Note:** Additional reading list is available with the concerned teacher.

#### (4 Credit Course)

#### SEMESTER – I Mathematics for Economics Course Code: ECO22103CR

**Course Description:** The emphasis of the course is on understanding economic concepts with the help of mathematical methods rather than learning mathematics itself. Hence, in this course student will be introduced to various economic concepts, which are amenable to mathematical treatment.

**Course Objective:** To familiarise students with the basic mathematics required to understand the various dimensions of economics.

#### **Course Outcome:**

- 1. Develop proficiency in mathematical tools essential for economic analysis.
- 2. Apply mathematical techniques to model and solve economic problems, including optimization and equilibrium analysis.
- 3. Interpret economic data using mathematical methods and statistical software

#### **Unit I: Basic Concepts**

Set theory- sets and set operations, cartesian product of sets; relations; functions; one-to-one and onto functions- demand and supply functions; objective functions, composite functions, inverse functions; logarithmic and exponential functions.

#### **Unit II: Differentiation**

Limits and continuity; Rules of differentiation; partial and total differential; relative maxima and minima- first and second derivative test; Euler's theorem; constrained optimization; Langragian multiplier; application of differentiation in economics.

#### **Unit III: Integration**

Integration – concept and fundamental theorems; indefinite and definite integrals; economic application of integration – consumer's surplus; producer's surplus; investment and capital formation.

#### Unit IV: Matrix Algebra

Matrices – types and operations; determinants; transpose; ad-joint and inverse of a matrix; rankof a matrix; Cramer's rule; matrix inversion method; Jacobian and Hessian rule

#### **Basic Reading List:**

- 1. Chiang A. C. & Kevin Wainwright. (2005). Fundamental Methods of Mathematical Economics. Tata McGraw Hill Education: India.
- 2. Sydsaeter, K., Hammond, P. (2002). Mathematics for Economic Analysis. Pearson:England.
- 3. S. S. Rangi. (2007). Mathematics for Students of Economics. S. Vikas & Co. Jalandhar.
- 4. Allen R. G. D. (2003). Mathematical Analysis for Economists. The Macmillan Press: New Delhi.
- 5. Henderson M. J. (2006). Microeconomics Theory. Tata McGraw-Hill: New Delhi.
- 6. Yamane T. (1995). Mathematics for Economists. Prentice Hall of India: New Delhi.

#### Statistical Methods Course Code: ECO22104DCE

**Course Description:** This course introduces the basic concepts and applied methods of statistics like descriptive statistics, sampling methods, probability, random variables and hypothesis testing. **Course Objective:** To enable students to understand basic as well as advanced concepts of statistics and its applications in economics.

#### **Course Outcome:**

- 1. Master the statistical techniques required for data collection, analysis, and interpretation in economics.
- 2. Apply regression analysis and hypothesis testing to empirical economic research.
- 3. Gain practical skills in using statistical software to analyze economic data.

#### Unit I: Descriptive Statistics and Sampling

Data sets in economics - qualitative, quantitative; scale; measures of central tendency; measures of dispersion; sampling methods: census, simple random sample with and without replacement, stratified sampling methods; designing a household sample survey.

#### **Unit II: Probability and Distribution**

Meaning and definition of probability; probability rules; addition rule; multiplication rule; Bayes theorem; conditional probability; concept of a random variable – discrete and continuous; expected values of a random variable; variance of a random variable; discrete random variables- Bernoulli; Binomial; Poisson, continuous random variables- the normal distribution, chi-square distribution.

#### **Unit III: Hypothesis Testing**

Testing of hypothesis - level of significance and level of confidence, confidence limits and critical region; tests of significance – type-I and type-II errors; goodness of fit; one tailed and two tailed tests; hypothesis testing based on Z-test, T-tests, chi-square and F tests

#### Unit IV: Correlation, Regression and Index Numbers

Correlation – meaning and scope; Karl Pearson's coefficient of correlation; rank correlation; partial and multiple correlation; regression – meaning and scope; simple and multiple regression; index numbers- types and construction, time and factor reversal test.

#### **Basic Reading List:**

- Rice J. A. (1995). Mathematical Statistics and Data Analysis (3<sup>rd</sup> ed.). Thomson Brookes/Cole: USA.
- Barrow M. (2006). Statistics for Economics, Accounting & Business Studies (7<sup>th</sup> ed). Pearson: New Delhi.
- 3. Hogg R. V. & A. T. Craig Hogg. (1970). Introduction to Mathematical Statistics.Macmillan Publishing & Co.: New York.
- 4. Gupta S. C. (2011). Fundamentals of Statistics. Himalayan Publishing House: New Delhi.
- 5. Gupta S. P. (2012). Statistical Methods. Himalayan Publishing House: New Delhi.
- 6. Floyd J. E. (2010). Statistics for Economists: A Beginning. University of Toronto.

Note: Additional reading list is available with concerned teacher.

#### (4 Credit Course)

#### SEMESTER – I Financial Institutions and Markets Course Code: ECO22105DCE

#### (4 Credit Course)

**Course Description:** This course introduces the theory and practice of financial system and its role in economic development. The course will also introduce the knowledge of working and functioning of financial markets, financial intermediaries, financial services and role of Central Bank.

**Course Objective:** To make students well conversant with the nature and role of financial system; to enable them to analyse the interconnection between financial institutions, financial regulation and financial services that influence the overall development of an economy.

#### **Course Outcome:**

- 1. Understand the structure and functions of financial institutions in the economy.
- 2. Analyze financial market instruments, including stocks, bonds, and derivatives.
- 3. Evaluate the impact of monetary policy and financial regulations on financial markets and the broader economy.

#### Unit I: Nature and Role of Financial System

Financial system-structure; financial system and economic development—from financial neutrality to financial activism; from financial volatility to financial stability; role of government in financial development; theories of the impact of financial development on savings and investment-prior saving theory; financial regulation theory; financial liberalizationtheory.

#### **Unit II: Financial Markets**

Classification of financial markets - functions of financial markets; instruments of developed money and capital markets; characteristics of financial instruments; derivatives markets-types

#### Unit III: Financial Intermediaries and Central Bank

Financial intermediaries - classification, role and functions; central banking — evolution, roleand functions; monetary policy— goals, tools, targets and limitations

#### Unit 1V: Financial Instruments and Services

Mutual funds – evolution and types; classification of financial services – merchant banking, underwriting, credit rating, venture capital, factoring, ADRs and GDRs

#### **Basic Reading List:**

- 1. Miskin F. (2015). The Economics of Money: Banking and Financial Markets. Addison Wesley Longmate: New York.
- 2. Bhole L. M. (2009). Financial Institutions and Markets. Tata McGraw Hill: New Delhi.
- 3. Hubbard G. R. (1997). Money, the Financial System and Economy. Addison Wesley: New York.
- 4. Gupta S. B. (2001). Monetary Economics. S. Chand & Co. Ltd.: New Delhi.
- 5. Bhasin N. (2009). Money, Banking and Financial Developments in India. New Century Publications: New Delhi.

#### SEMESTER – I Industrial Economics Course Code: ECO22106DCE

#### (4 Credit Course)

**Course Description:** This course presents an overview of various dimensions of industrial economics. The focus is on understanding the behavior of firms under different market conditions. A large part of the course consists of analyses of formal economic models, location theories, investment decisions and industrial financing. It intends to make students understandbasic models of the behavior of firms and industrial organization and their application to policyissues.

**Course Objective:** To familiarize students with a broad range of methods and models applied by economists in the analysis of firms and industries.

#### **Course Outcome:**

- 1. Analyze the behavior of firms in different market structures.
- 2. Assess the role of competition policy and antitrust regulations in promoting market efficiency.
- 3. Examine the implications of technological change and globalization on industrial organization.

#### Unit I: Behavior of Firm

Nature and scope of industrial economics; rationale of industrialization; objectives & organizational pattern of a firm; determinants & measurements of market concentration & diversification

#### Unit II: Efficiency & Innovation

Determinants & measurements of industrial efficiency & profitability, Innovation – concept & theories of innovation – Mansfield's, Nordhau's, Barzel & Needham

#### Unit III: Location and Growth

Determinants & theories of industrial location – Alfred Weber, Tord Palander, August Losch & Paul Krugman; Downie's & Marris's theories of growth of a firm.

#### Unit IV: Investment & Policy

Investment decisions; methods of project evaluation; input – output method; sources of industrial finance; industrial policies of India; new industrial corridors of India.

#### **Basic Reading List:**

- 1. R. R. Barthwal. (2018). Industrial Economics: An Introductory Textbook. New Age International Publishers: New Delhi, India.
- 2. Donald A. Hay & Derek J. Morris. (1979). Industrial Economics: Theory & Evidence. Oxford University Press: London.
- 3. P. J. Divine & R. M. Jones. (1976). An Introduction to Industrial Economics. George Allenand Unwin Ltd.: London.
- 4. Paul R. Ferguson. (1994). Industrial Economics: Issues and Perspectives. Palgrave Macmillan: New York.
- 5. A. K. Sharma. (2006). Industrial Economics. Anmol Publications Pvt. Ltd., New Delhi:India.
- 6. Sandeep K. Saxena. (2018). Industrial Economics. Paradise Press, Daryaganj, New Delhi: India.
- 7. Jean Tirole. (2019). Theory of Industrial Organization. MIT Press: USA.

#### SEMESTER – I Economics of Education and Health Course Code: ECO22107DCE

#### (4 Credit Course)

**Course Description:** This course deals with two important components of human resource development viz education and health. It is intended to provide a basic understanding of role of education and health to economic development both at micro and macro levels.

**Course Objective:** The course is intended to acquaint students with an understanding of linkages between human capital and economic development.

#### **Course Outcome:**

- 1. Explore the economic factors influencing education and healthcare outcomes.
- 2. Evaluate government policies and interventions aimed at improving educational and healthcare systems.
- 3. Analyze the relationship between human capital development and economic growth.

#### **Unit I: Economics of Education**

Nature and scope of economics of education; education as consumption and investment goods;cost of education- expenditure on education, private costs and social costs; direct, indirect and opportunity costs; benefits of education— direct and indirect benefits, private and social benefits; cost-benefit analysis in education; education as human capital; education and economic growth.

#### Unit II: Educational Planning and Financing

Approaches to educational planning- production function models; manpower requirement approach, input-output model, gender-based approach; educational planning in India, role of financing in educational development, educational financing in India-equity and efficiency effects of financing education in India.

#### Unit III: Economics of Health

Nature and scope of economics of health; concept of medical health and health care; health as consumption and investment goods; role of health in economic development; health as human capital; economic dimension of health care-demand and supply of health care; government intervention in health care markets-economic rationale and forms.

#### Unit IV: Public Policy on Health and Development Dimensions

Public policy in health care delivery; Hale and DALY life tables; health dimension of development-poverty and malnutrition; inequalities in health-class and gender perspectives; health care in India: post reform scenario.

#### **Basic Reading List:**

- 1. Berman, P. (1995). Health Sector Reform in Developing Countries: Making Health Development Sustainable. Harvard series on population and International Health: Boston.
- 2. Blaugh, Mark. (1972). Introduction to Economics of Education. Penguin: London.
- 3. Cohen, E. and T. Gaske. (1989). Economics of Education. Pergamon Press: London.
- 4. Folland, S. (2009). The Economics of Health and Health care. Pearson Prentice Hall: New Delhi.
- Henderson, J. W. (2007). Health Economics & Policy (3<sup>rd</sup> ed.). Thomson South-Western: UK.
- 6. Govinda R. (2002). India Education Report. Oxford University Press: New Delhi.

#### **Basic Microeconomics Course Code: ECO22001OE**

#### (2 Credit Course)

**Course Description:** The Course explores what microeconomics in broader framework dealswith. **Course Objective:** To develop basic understanding of microeconomics among students from non-economic background.

#### **Course Outcome:**

- 1. Understand the real world analysis of microeconomics.
- 2. Understand the theories of consumer behaviour.
- 3. Evaluate market structures, including perfect competition, monopoly, and oligopoly, and their implications for resource allocation.

#### **Unit I: Consumer Analysis**

Introduction — definition and central problems in economics; law of demand and supply; utility – cardinal and ordinal measurement; indifference curve and consumer's equilibrium; elasticity – types and measurement

#### Unit II: Production and Market Analysis

Production function; average and marginal product; returns to scale; isoquant and isocost lines; producer equilibrium; costs and their types; market structure- perfect competition and monopoly.

#### **Basic Reading List:**

- 1. Ahuja H. L. (2007). Advanced Economic Theory: Microeconomic Analysis. S. Chand & Company: New Delhi.
- 2. Bernheim, B. Douglas & et. al. (2014). Microeconomics. McGraw-Hill/Irwin: New York.
- 3. T. R. Jan & V. K. Ohri. (2021). Introduction to Microeconomics. MacMalian: New Delhi.
- 4. Stonier and Hague. (1982). A text book of Economic Theory. Penguine: USA.

#### Planning and Development Course code: ECO22001GE

#### (2 Credit Course)

**Course Description:** It deals with various concepts of economic planning and throws light on the role of government in economic development.

**Course Objective:** To make students aware about the planning and its role in economic development.

#### **Course Outcome:**

- 4. Understand the theories and models of economic development.
- 5. Evaluate strategies for sustainable economic growth and poverty reduction.
- 6. Analyze the role of international organizations and policies in promoting development.

#### **Unit I: Introduction**

Development planning - concept and approaches; market economy— market mechanism and development, market failures; rationale and practice of planning; government intervention in promoting development; government failure, social capital and economic development.

#### Unit II: Poverty & Inequality

Poverty- concept and measurements; inequality- concept and measurements- Lorenz curve and Gini coefficient; development-concept, approaches, and measurement- HDI, development gap-concept and causes.

#### **Basic Reading List:**

- 1. Jhingan, M. L. (2006). The Economics of Development and Planning. Vrinda Publications: New Delhi.
- 2. Mishra, S. K. & V. K. Puri. (2016). Economics of Development and Planning. Himalayan Publishing House: New Delhi.
- 3. Thirlwal A. P. (2003). Growth and Development. Macmillan Press Ltd.: U.K.
- 4. Todaro & Smith. (2005). Economic Development. Longman: London.

#### SEMESTER – II Microeconomics – II Course Code: ECO22201CR

#### (4 Credit Course)

**Course Description:** This course provides an understanding of the foundations of modern economic analysis. Teaching the use of analytical tools to comprehend topics like complex decision making under uncertainty, non-competitive conditions, and the theory of distribution and exchange form the subject matter of this course.

**Course Objective:** To familiarize the student with complexities involved in consumer behaviour in a general equilibrium framework in order to develop an aptitude of critical thinking in economic matters of exchange, welfare and distribution among them.

#### **Course Outcome:**

- 1. Deepen the understanding of advanced microeconomic concepts, including game theory and information economics.
- 2. Apply microeconomic tools to analyze issues related to market failures and public goods.
- 3. Conduct economic research using advanced microeconomic models.

#### Unit I: Oligopoly and Behavioural Economics

Classifying games; strategic games - examples: Prisoner's dilemma, matching pennies, Stag Hunt; Nash equilibrium-illustrations: Cournot's model of oligopoly, Bertrand's model of oligopoly; mixed strategy Nash equilibrium; extensive games with perfect information- Stackelberg's model of duopoly.

#### Unit II: Uncertainty and Information

Choice under uncertainty-contingent consumption; utility functions and probabilities; expected utility theorem-VNM; risk aversion-Pratt-Arrow coefficient; Risk aversion and insurance; Asymmetric information-Market for lemons; Market signalling; principle- agent problems; moral hazard

#### **Unit III: Distribution**

Neo-classical approach- marginal productivity theory; product exhaustion theorem; elasticity of technical substitution and factor shares; technical progress and factor shares; pricing of fixed factors of production; theory of distribution in imperfect product and factor markets.

#### Unit IV: Theory of Exchange and Welfare

Pareto optimal allocations – productive, allocative and mix; Pareto optimal allocation and competitive markets; Walrasian equilibrium – existence, uniqueness and stability; two fundamental theorems of welfare economics; social welfare function, compensation principle. equity- efficiency trade off.

#### **Basic Reading List:**

- Gravelle, H and Ray Rees. (2004). Microeconomics (3<sup>rd</sup> ed.). Prentice Hall Longman: London
- 2. Varian H. R. (2010). Intermediate Microeconomics A Modern Approach. EWP and WW Norton and Co, Inc.: New York
- 3. Osborne, M. J. (2009). An Introduction to Game Theory. Oxford University Press: India.
- 4. Nicholson W. (1992). Microeconomic Theory: Basic Principals and Extensions. TheDriden Press: USA.
- 5. Koutsoyiannis, A. (2000). Modern Microeconomics (2<sup>nd</sup> ed.). Macmillan Press: London.
- 6. Perloff, J. M. (2014). Microeconomics: Theory and Applications with Calculus. United Kingdom: Pearson.

## Macroeconomic – II

#### Course Code: ECO22202CR

#### (4 Credit Course)

**Course Description:** This course deals with the applied macroeconomics. It will introduce to modern-day issues in contemporary macroeconomics.

**Course Objective:** To develop critical thinking among students regarding contemporary macroeconomic debates.

#### **Course Outcome:**

- 1. Explore advanced topics in macroeconomic theory, including dynamic models of economic growth and business cycles.
- 2. Evaluate the effects of globalization and trade on macroeconomic stability.
- 3. Conduct empirical research to analyze macroeconomic phenomena and policy implications.

#### Unit I: The IS-LM Model: A General Framework for Macroeconomic Analysis

IS curve – shifts and slope; LM curve- shift and slope; fiscal and monetary policy – relative effectiveness; derivation of aggregate demand curve; zero interest rates and macro policy; Ricardian equivalence; neoclassical IS-LM model

#### Unit II: Macroeconomic Policy in Open economy

The IS-LM model for open economy- Mundell Fleming model; imperfect and perfect capital mobility; fiscal and monetary policies under fixed and flexible exchange rates; central bank intervention in forex market.

#### Unit III: Recent Developments in Macroeconomic Theory

Monetarism- central propositions; new classical economics; theory of rational expectations; Lucas imperfect information model; supply side economics- Laffer curve and supply side, success or failure; new Keynesian economics- central propositions; sticky wages, insider- outsider and efficiency wage models.

#### **Unit IV: Macroeconomic Policy and Debates**

Policy debates in macroeconomics-dynamic inconsistency – rule vs. discretion debate; case for central bank independence; inflation targeting- concept and experience, Taylor's rule; monetary policy in light of trilemma configuration.

#### **Basic Readings List:**

- 1. Snowdon, B., Vane, H. R. (2005). Modern Macroeconomics: Its Origins, Development and Current State. United Kingdom: Edward Elgar Publishing.
- 2. Branson, W. H. (2005). Macro Economics Theory and Policy. Harper & Row: New York.
- 3. J. Bradford Delong. (2007). Macroeconomics: McGraw Hill Ryerson, Limited.
- 4. T. R. Froyen. (2013). Macroeconomics: Theories and Policies. Pearson: USA.
- 5. David Romer. (2018). Advanced Macroeconomics (4<sup>th</sup> ed). McGraw Hill Company Ltd.: New York.
- 6. R. Dornbusch & et. al. (2013). Macroeconomics. Tata McGraw Hill Private Limited: New Delhi.

#### History of Economic Thought Course Code: ECO22203CR

**Course Description**: The course begins with the study of pre-classical economic thought and then traces its transformation through classical and neo-classical schools of thought. Marxism and capitalism as major economic ideologies are also discussed.

**Course Objective:** To make the students acquainted with the evolution of economic ideas as a response to economic problems and policy issues of different times.

#### **Course Outcome:**

- 1. Trace the development of economic thought from classical economists to modern theorists.
- 2. Analyze the evolution of economic theories and their impact on economic policy.
- 3. Critically assess the relevance of historical economic ideas in contemporary economic debates.

#### **Unit I: Pre-Classical Economic Thought**

Importance of history of economic thought; pre classical economic thought: mercantilism - balance of trade doctrine; physiocracy; net product and Quesnay's tableau of economique.

#### **Unit II: Classical Economic Thought**

Classical economics: Adam smith- division of labour, theory of value, David Ricardo-theory of value and theory of distribution, Malthus— theory of population; Ricardo-Malthus controversy over gluts; Jean Baptise Say and John Stuart Mill — concept of political economy;utilitarianism- J. S. Mill and Bentham.

#### Unit III: Karl Marx and the Theory of Capitalist Development

Classical political economy and Marx, dialectical and historical materialism, essentials of capitalist production, labour theory of value, theory of capital accumulation -internal and external sources of primitive accumulation, organic composition of capital, falling tendency of the rate of profit; nature of capitalist crisis.

#### Unit IV: Marginalism and later Developments

Essential features of marginalism, Jevons's theory of value, Carl Menger theory of value, A. Marshall and his contribution, Walras' theory of general equilibrium. Economics of welfare: A. C. Pigou, V. Pareto; Keynesian school of thought-historical background; major tenets; post Keynesians; new Keynesians – an overview.

#### **Basic Reading List:**

- 1. Blackhouse, A. (1985). History of Modern Economic Analysis. Oxford University Press: USA.
- 2. Stanley, L. Brue and R. R. Grant. (1994). Evolution of Economic Thought. South -Western Cengage Learning: USA.
- 3. Guide and Rist. (1973). A History of Economic Doctrine. Oxford University Press: New Delhi.
- 4. Haney, L. (1979). History of Economic Thought. Surject Publications: New Delhi.
- 5. Dobb, Maurice. (1973). Theories of Value and Distribution since Adam Smith: Ideologyand economic theory. Cambridge University Press. USA.
- 6. Landreth. H. & D. C Colander. (2001). History of Economic Thoughts, Houghton Mifflin Company: Boston.

#### SEMESTER – II International Trade Course Code: ECO22204CR

#### (4 Credit Course)

**Course Description:** This course covers the topics like basis of trade, comparative and absolute advantage; Heckscher-Ohlin model and intra-industry trade. Course intends to explore the concepts like factor price equalization, strategic trade models and the implications for winners and losers and government policy. This will be followed by a discussion on protectionism, integration, issues like impact of trade on growth and problems of developing countries.

**Course Objective:** To provide students with a comprehensive and clear exposition of the theory and principles of international trade that is essential for understanding and evaluation of important international economic issues.

#### **Course Outcome:**

- 1. Analyze the theories of international trade and their implications for trade policy.
- 2. Evaluate the gains from trade and the distributional effects of trade liberalization.
- 3. Examine contemporary issues in international trade, such as trade wars and trade agreements.

#### Unit I: Pure Theories of International Trade

Review of classical theories of international trade; Theory of reciprocal demand; Heckscher- Ohlin theory; Stolper-Samuelson theorem; Rybczynski theorem; factor price equalization theorem; specific factor model; Leontief paradox; factor intensity reversal.

#### Unit II: Alternative Theories of International Trade

Monopolistic competition and international trade; economies of scale and international trade; intra industry trade; preference similarity hypothesis; strategic trade theory; technological gapmodel; product cycle model.

#### Unit III: Theories of Protection and Economic Integration

Tariff- meaning and types; effects of tariff in a partial equilibrium framework; generalequilibrium analysis of tariff-small and large country case; optimum tariff; effective rate of protection; Quota and other non-tariff barriers; regional economic integration- types; theory ofcustoms union- trade creation and trade diversion.

#### Unit IV: Growth Effects and Problems of Developing Countries

Trade as engine of growth; growth of factors of production & technical progress; effects of growth on trade; export instability and economic development; international commodity agreements; import substitution versus export orientation; Prebisch-Singer hypothesis.

#### **Basic Reading List:**

- 1. Soderston B. and G Reed. (1999). International Economics. McMillan Press Ltd.,: London.
- Krugman P. R. and M. Obstfeild. (2012). International Economics Theory and Policy. Addison Wesley: New Delhi.
- 3. Salvatore D. (2011). International Economics. Wiley India: New Delhi.
- 4. Marrewijk C. V. (2007). International Economics: Theory, Application and Policy. Oxford University Press: New York.
- 5. Chacholieds M. (1999). International Economics. Macmillan Publication: USA.

## Basic Econometrics

#### (4 Credit Course)

Course Code: ECO22205DCE

**Course Description:** Applications of economic theory need a reasonable understanding of economic relationship and relevant statistical methods. This course becomes a powerful tool for understanding of applied economic relationships for meaningful research in economics. Many of the methods introduced in this course are also used in business, finance and many other disciplines in social and applied sciences.

**Course Objective:** To equip the students with theory of econometrics, its application in economics and to enable them to construct econometric models, estimate the parameters of these models and interpret the parameters estimated.

#### **Course Outcome:**

- 1. Develop proficiency in econometric methods for estimating economic relationships.
- 2. Apply regression analysis to real-world economic data and interpret results.
- 3. Use econometric software for empirical research and policy analysis.

#### **Unit I: Basic Statistical Concepts**

Review of basic statistical concepts; probability density/mass function; moment generating function; joint distribution function; concept of an estimator and its sampling distribution: methods of estimation; desirable properties of an estimator.

#### **Unit II: Basic Regression Analysis**

Nature, meaning and scope of econometrics; data issues; time series, cross section and panel data; simple and general linear regression model; assumptions, estimation through OLS approach; Gauss-Markov theorem; concepts and derivation of  $R^2$  and adjusted  $R^2$ .

#### **Unit III: Problems in Regression Analysis**

Nature, test, consequences and remedial steps of problems of heteroscedasticity; multi-co-linearity and auto-correlation; non-normality; problems of specification error; errors of measurement.

#### Unit IV: Qualitative Variables in Regression

Dummy variable technique – testing structural stability of regression models; interaction effects; seasonal analysis; piecewise linear regression; use of dummy variables; regression withdummy dependent variables; the linear probability model; logit and probit models.

#### **Basic Reading List:**

- 1. Wooldridge J. (2013). Introductory Econometrics: A Modern Approach. Cengage Learning: USA.
- 2. Maddala G. S. (1993). Econometric Methods and Applications. Edward Elgar Publishing Ltd.: UK.
- 3. Goldberger A. S. (1998). Introductory Econometrics. Harvard University Press: USA.
- 4. Johnston J. (2015). Econometric Methods. Tata McGraw Hill: New Delhi.
- 5. Kennedy P. (1998). A Guide to Econometrics. MIT Press: New York.
- 6. Gujarati, D. N. (2009). Basic Econometrics. McGraw Hill: New Delhi.

### **Monetary Economics**

#### Course Code: ECO22206DCE

(4 Credit Course)

**Course Description:** This course intends to introduce the basic concepts of the monetary theory and policy in order to understand the role and functioning of financial system and monetary mechanisms of an economy. It also introduces the theories of demand for money, thesupply aspect of money, theories of interest and role of monetary policy.

**Course Objective:** To familiarise students with the basic concepts, theories and approaches; to enable them to understand monetary policy framework and challenges confronting the apex monetary authorities.

#### **Course Outcome:**

- 1. Understand the role of money, banking, and central banks in the economy.
- 2. Analyze the transmission mechanisms of monetary policy and its effects on inflation and output.
- 3. Evaluate contemporary challenges in monetary policy, such as unconventional monetary tools.

#### Unit I: Evolution of Monetary Standard

Concept of money and its functions; monetary standard – evolution; principles of note-issue: currency principle and the banking principle; methods of note issue, India's present currency system, brief history of Indian rupee; demand for money – an overview.

#### Unit II: Supply of Money

Money supply – instruments of money supply; determinants of money supply; H – theory of money supply; determinants of money multiplier; money multiplier process; behavioural model of money supply determination; money supply in static model; Reserve bank's analysis fmoney and balance sheet.

#### **Unit III: Theories of Interest**

Introduction-term structure and risk structure of interest rates; theories – expectations theory, market segmentation theory, preferred habitat theory; determinants of the general structure of interest rates; heterogeneity of interest rate determination; interest rate differentials; Wicksell effect and Fisher effect.

#### Unit IV: Monetary Policy in India

Monetary policy - framework and evolution; Monetary targeting; inflation targeting by the RBIand the role of MPC; liquidity management and OMOs; monetary transmission mechanism; challenges to monetary policy ; market stabilization schemes; analysis of current monetary policy of RBI; monetary-fiscal interface in India: an overview .

#### **Basic Reading List:**

- 1. Miskin F. (2015). The Economics of Money: Banking and Financial Markets. Harper Collins Publishers.
- 2. Bhole, L. M. (2009). Financial Institutions and Markets. Tata McGraw Hill Comp: New Delhi.
- 3. Hubbard, G. R. (2019). Money: The Financial System and Economy. Addison Wesley: England.
- 4. Burton, M. and B. Brown. (2009). Financial System and Economic Principles of Moneyand Banking. Prentice Hall: New Delhi.
- 5. Gupta, S. B. (2010). Monetary Economics. S. Chand and Com. Ltd.: New Delhi.

#### Agriculture Economics Course Code: ECO22207DCE

#### (4 Credit Course)

**Course Description:** Starting with the explanation of theoretical questions, the course intendsto enhance the awareness of issues that are relevant to agriculture economics and contemporarydebates in the literature in order to enable the analyses of these issues with basic microeconomics concepts. It also attempts to put Indian agriculture in proper perspective in light with established theories and models related to the subject.

**Course Objective:** The objective of this course is to provide a detailed treatment of issues in agriculture economics to those intending to specialize in this area.

#### **Course Outcome:**

- 1. Examine economic principles and challenges specific to the agricultural sector.
- 2. Analyze the factors affecting agricultural production, pricing, and rural development.
- 3. Evaluate policies related to agricultural subsidies, trade, and food security.

#### **Unit I: Agriculture and Production Function**

Nature and scope of agricultural economics; role of agriculture in economic development; principles of resource allocation & conditions of equilibrium: factor-factor, product-product and factor-product relationship; agriculture production functions – Cobb-Douglas, CES, Translog, Spillman and Quadratic production function.

#### Unit II: Theories & Models of Agricultural Development

Interdependence between agriculture and industry; models of interaction-Lewis; Ranis – Fei model and Jorgenson model; Schultz's thesis of traditional agriculture; Mellor's theory of agricultural development

#### Unit-III: Agricultural Finance and Debt

Agricultural finance – need and importance; rural credit markets in India; institutional setup of agricultural finance in India; agricultural wages and wage differential; agriculture debt in India - recent issues

#### Unit-IV: Agricultural Marketing and Pricing

Agricultural marketing – objectives, structure and constraints; marketable & marketed surplus estimation; national agriculture market (e-NAM) – advantages and challenges; minimum support price: method, issues and policies; WTO and India's agriculture.

#### **Basic Reading List:**

- 1. Lekhi, R. K., Singh, J. (2016). Agricultural Economics: An Indian Perspective. Kalyani Publishers: New Delhi.
- 2. J. W. Mellor. (1969). The Economics of Agricultural Development, Cornell University Press: New York.
- 3. K. Subbarao. (1989). Agricultural Marketing and Credit. ICSSR: New Delhi.
- 4. E. O. Heady. (1961). Economics of Agricultural Production and Resource Use. Prentice Hall: New York.
- 5. Reddy S. S & Ram P. R. (2006). Agricultural Economics. Oxford & IBH Publishing Co. Pvt. Ltd.: New Delhi.

#### SEMESTER – II Labour Economics

#### Course Code: ECO22208DCE

#### (4 Credit Course)

**Course Description**: Labour economics is the study of how labour markets work. This course intends to focus on investigating numerous aspects of the labour market, including the supply of and demand for labour, labour-market equilibrium, human capital, employment and unemployment. It also deals with state – labour relations within the framework of labour unions and industrial relations.

**Course Objective**: To develop student's abilities in acquiring a better understanding of the functioning of labour markets.

#### **Course Outcome:**

- 1. Explore theories of labor markets and labor supply and demand.
- 2. Analyze issues related to wage determination, labor market discrimination, and unemployment.
- 3. Assess the impact of labor market policies, such as minimum wage laws and labor unions.

#### Unit I: Labour Market and Employment

Nature and characteristics of labour market; the classical, new-classical and dual economy labour markets; demand for labour relating to size and pattern of investment and choice of technology; supply of labour in relation to growth of labour force; employment and development relationship.

#### **Unit II: Wage Determination – Theory and Practice**

Classical, neo-classical and bargaining theory; various concepts of wages—minimum wages; living wages and fair wages; problem of implementation of minimum wages; wage determination in urban and rural sector – organized and unorganized; wage and non-wage components and labour remuneration.

#### Unit III: Industrial Relations and Trade Unions

Growth of industrialization and emergence of unionism; theories of labour movement— the Marxian view; theory of industrial democracy by Sidney and Beatrice Webb; growth; structureand pattern of trade unionism in India; achievements of trade union movement in India; determinants of industrial disputes.

#### Unit IV: State and Labour

Role of state; labour matters and safety nets; labour laws — labour legislations in India, industrial disputes act; trade union act; employees state insurance act; international labour organisation — role and functions; child labour; gender issues.

#### **Basic Reading List:**

- 1. Ehren Berg, R. G. & R. S. Smith. (2012). Modern Labour Economics: Theory and Public Policy. Addison Wesley: NYC.
- 2. Mcconnell, C. R., S. L Brue, & D. A. Machperson. (2003). Contemporary Labour Economics. Mcgraw Hill: New York.
- 3. Joshi, M. V. (2014). Labour Markets and Labour Problems. Romtrad Corp, Sterling Heights MI, USA.
- 4. Sapsford, D. (2014). Labour Market Economics. Harper Collins Publishers Limited: New Delhi.
- 5. Pierre C. (2015). Labour Economics. Prentice Hall India Learning Ltd. New Delhi.
- 6. Borjas, G. J. (2012). Labour Economics. McGraw Hill: New York.

### SEMESTER – II Basic Macroeconomics

#### (2 Credit Course)

#### **Course Code: ECO22002OE**

**Course Description**: The Course explores what economics in broader framework deals with. It intends to present a summary of the concept of two sector models. It also covers basics of business cycles and Inflation and Unemployment

**Course Objective**: To enable students from non- economic background to understand the basic concepts of macroeconomics and make a broader distinction between Classical and Keynesian thought.

#### **Course Outcome**:

- 1. Review core concepts in macroeconomics, including national income accounting and aggregate demand and supply.
- 2. Gain a deeper understanding of macroeconomic equilibrium and the role of fiscal and monetary policies.
- 3. Apply macroeconomic models to analyze economic fluctuations and policy responses.

#### Unit I: National Income and Money

National income - concepts and measurement; real and nominal GDP; price indices; circular flow of income; components of aggregate demand: consumption and investment; money – types and functions; measures of money supply.

#### Unit II: Business Cycle & Inflation

Business cycle – features, phases, causes and consequences; stabilization policies; fiscal policyand direct controls; inflation – meaning and types; demand pull and cost push inflation; causes and effects of inflation.

#### **Basic Reading List:**

- 1. Ahuja, H. L. (2009). Macroeconomics: Theory and Policy. S. Chand and Company Ltd.: New Delhi.
- M. C. Vash. (2010). Macroeconomic Theory (14<sup>th</sup> ed.). Vikas Publishing House Pvt. Ltd.: New Delhi.
- 3. Shapiro, E. (2005). Macroeconomic Analysis. Galgotia Publications: New Delhi.
- 4. T. R. Jan & V. K. Ohri. (2021). Introduction to Macroeconomics. MaGraw Hill: New Delhi. **Note:** Additional reading list is available with the concerned teacher.

#### SEMESTER – II Industrial Organisation Course Code: ECO22002GE

#### (2 Credit Course)

# **Course Description:** The focus of this course is on understanding the organisational structure of business firms, their growth, efficiency, location and measurements. It also covers topics like theories of growth of firms and industrial locations.

**Course Objective:** To familiarize students with basic concepts related to the analysis of firms and industries

#### **Course Outcome:**

- 1. Investigate core topics in industrial organization, including strategic behavior and market power.
- 2. Analyze mergers, acquisitions, and antitrust policies in the context of industrial markets.
- 3. Conduct research on market structure, firm conduct, and performance in various industries.

#### Unit – I: Firm's Behaviour

Need and scope; organizational structure of a firm; objectives of firm; industrial efficiency – determinants and measurement.

#### Unit - II: Location and Growth of a firm

Theories of Growth of a Firm – Downie's & Marris's; theories of industrial location – Weber and Krugeman; diversification – concept & measurement

#### **Basic Reading List:**

- 8. R. R. Barthwal. (2018). Industrial Economics: An Introductory Textbook. New Age International Publishers: New Delhi, India.
- 9. Jean Tirole. (2019). Theory of Industrial Organization. MIT Press: USA.
- 10. Paul R. Ferguson. (1994). Industrial Economics: Issues and Perspectives. Palgrave Macmillan: New York.
- 11. Donald A. Hay & Derek J. Morris. (1979). Industrial Economics: Theory & Evidence. Oxford University Press: London.

#### SEMESTER – III Economics of Development Course Code: ECO22301CR

(4 Credit Course)

**Course Description**: This course is designed to focus on how the economies can embark on the path of development. Besides, it intends to explain the transition of economies with the helpof different models. A section is also devoted to the financing of economic development through domestic and foreign sources.

**Course Objective**: To enable students to think how transition occurs in an economy from thepath of grind to prosperity and make them aware about changing contours of development. **Course Outcome**:

- 1. Analyze the theories and strategies for economic development in both developed and developing countries.
- 2. Assess the impact of globalization and trade on economic development outcomes.
- 3. Evaluate development policies and their effectiveness in addressing poverty and inequality.

#### Unit I: Poverty, Inequality and Development

Concept and measures of poverty; Chennery-Ahluwalia welfare index; Construction of poverty weighted index of social welfare; measurement of income inequality-Lorenz curve; properties of a desirable inequality measure; Goulet's and A. K. Sen's concept of development –capabilities approach; concept and assessment of development gap.

#### Unit II: Theories of Development – I

Adam smith; David Ricardo and Karl Marx; theory of balanced and unbalanced growth; Myrdal's theory of circular and cumulative causation; organizational dualism and economic development (Hla Myint); Kremer's O-ring theory of economic development.

#### Unit III: Theories of Development – II

The model of complementarities between agriculture and industry; Lewis model of unlimited supply of labour; Harris-Todaro model of migration; low level equilibrium trap; choice of techniques and appropriate technology; choice of techniques and conflict in objectives.

#### **Unit IV: Financing Economic Development**

Financing development from foreign and domestic sources; prior-saving and forced-saving approach; Keynesian approach; quantity theory approach (non-inflationary financing of investment); dual-gap analysis and foreign borrowings; International – debt and debt-servicing problems; optimal borrowings and sustainable debt.

#### **Basic Reading list:**

- 1. Higgins B. (1959). Economic Development: Principles, Problems and Policies. Norton and Company: New York.
- 2. Meir, G. M. and J. E. Rauch. (1997). Leading issues in Economic Development. Oxford University Press: New York.
- 3. Gills, M. Perkins, Romer and Snodgrass. (1989), Economics of Development. W. W. Norton and Company: New York.
- 4. Todaro, M. P. & Smith. (2013). Economic development. Pearson Education. New Delhi.
- 5. Ray, D. (2010). Development Economics. Oxford University Press: New Delhi.
- 6. Thirlwall, A. P. (2014). Growth and development. Palgrave MacMillan: UK.

#### SEMESTER – III Indian Economic Development Course Code: ECO22302CR

#### (4 Credit Course)

**Course Description**: The emphasis of this course is on the overall social, political and economic environment influencing policy decisions in contemporary settings. Such an analysisis essential because the Indian economy is a unique amalgam of alternative competing and often conflicting theories. A proper understanding of its working is imperative if the student isto comprehend the ramifications that underlie most of the observed phenomena in the Indian economic set-up.

**Course Objective:** To sharpen the analytical faculty of the students by highlighting an integrated approach to the functioning aspects of the Indian economy, keeping in view the scope for alternative approaches.

#### **Course Outcome:**

- 1. Understand the economic history and current economic challenges facing India.
- 2. Analyze the impact of economic reforms and policies on India's growth and development.
- 3. Evaluate the role of agriculture, industry, and the service sector in India's economic transformation.

#### Unit I: Economic Development since Independence

Major features of the economy at independence; growth and development under different policy regimes — goals, constraints, institutions and policy framework; an assessment of performance; regional contrasts; structural change; savings and investment

#### Unit II: Population and Human Development

Demographic trends and issues; migration and urbanization – trends and issues; education - status and policy interventions; health and malnutrition – extent, issues and policy response

#### **Unit III: Growth and Distribution**

Poverty – measures, trends and various methodologies for poverty calculation in India; inequality and unemployment – extent, incidence and trends; public policies of employment generation.

#### Unit IV: Growth Dynamics and Macroeconomic Policies

Changing contours of state & market in Indian economic growth; distribution and structural change – comparative historical perspective; trade and investment policy; fiscal and monetarypolicies; new tax regime – GST.

#### **Basic Reading List:**

- 1. Dreze J. and Amartya Sen. (2013). An Uncertain Glory India and Its Contradictions. Princeton University Press: USA.
- Uma Kapila. (2020). Indian Economy since Independence (31<sup>st</sup> ed.). Academic Foundation: New Delhi.
- 3. Panagariya, A. (2008). India the Emerging Giant. Oxford University Press: USA.
- 4. Pulapre Balakrishnan. (2010). Economic Growth in India: History and Prospect. Oxford University Press: USA.
- 5. Pranab Bardhan. (2013). Awakening Giants, Feet of clay: Assessing the economic rise of China and India. Princeton University Press: England.

**Note:** Additional reading list of research articles for each topic for this course is available with the concerned teacher.

#### SEMESTER – III International Finance Course Code: ECO22303CR

#### (4 Credit Course)

**Course Description:** Starting with conceptual framework and working of foreign exchange markets, exchange rate determination and the balance of payments adjustment mechanism. It discusses in depth exchange rate regimes. Issues related to foreign capital markets as well as the role played by the international financial system are also dealt with.

**Course Objective:** To provide the conceptual and analytical framework for thinking about contemporary issues in international finance.

#### **Course Outcome:**

- 1. Examine the theories and mechanisms of international financial markets.
- 2. Analyze exchange rate determination and its implications for trade and investment.
- 3. Assess the management of foreign exchange reserves and international financial crises.

#### **Unit I: Foreign Exchange Markets**

Organisation and functions of the foreign exchange markets; exchange rate determination; arbitrage; exchange risk — hedging and speculation; foreign exchange transactions — spot, forward and swap; forward exchange markets- factors determining forward rates; interest parity theory and role of speculators; purchasing power parity theory; asset market approach.

#### Unit II: BOP Adjustments Mechanism

Balance of payment adjustment under flexible and fixed exchange rate system — price and income adjustments; monetary approach to balance of payments; elasticity approach —elasticities and Marshal-Lerner condition, elasticity and time: the J-Curve; absorption approach.

#### **Unit III: International Monetary System**

Exchange rate regime — gold standard (1880-1914), inter war period (1918-1939); Bretton Wood system (1945-1973); IMF system in operation (1947-1971): — the dollar shortage (1945-1958), the dollar surplus: a basic dilemma, failure of adjustment, perimeter defence and basic reforms; floating and managed floating exchange rate system; role and functions of international monetary fund (IMF) and World Bank.

#### Unit IV: Foreign Capital Market and Financial Crisis

International capital markets and gains from trade; growth and structure of international capital market; offshore banking and offshore currency trading; euro currency market; currency crisis — concept and characteristics; first, second and third generation models of currency crises.

#### **Basic Reading List:**

- 1. Marrewijk, C. V. (2007). International Economics: Theory. Application and Policy. Oxford University Press: New York.
- 2. Krugman, P. R. and M. Obstfeild. (2012). International Economics: Theory and Policy. Addison Wesley: New Delhi.
- 3. Soderston, B. and G Reed. (1999). International Economics. McMillan Press Ltd.,: London.
- 4. Carbaugh, R. J. (2008). International Economics. Cengage Learning: New Delhi.
- 5. Chacholieds, M. (1999). International Economics. Macmillan Publication: USA.
- 6. Salvatore, D. (2011). International Economics. Wiley: New Delhi.

#### SEMESTER – III Advanced Econometrics Course Code: ECO22304DCE

#### (4 Credit Course)

**Course Description:** This course presents a blend of theory and application of econometrics. It provides students with the theoretical tools and practical experience necessary to do applied econometric research and as such the lecture sessions will include a number of illustrations of empirical econometric studies and their possible estimation using data sets in lecture sessions.

**Course Objective:** To engage students in active learning of critical thinking about econometrics and develop an aptitude for empirical research.

#### **Course Outcome:**

- 1. Develop advanced econometric modeling skills for empirical economic research.
- 2. Apply time-series and panel data analysis techniques to economic data.
- 3. Conduct independent research projects using advanced econometric methods.

#### **Unit I: Time Series Analysis**

Stochastic process, concept of stationarity using AR, MA and ARMA process, non-stationary process- random walk with and without drift; test for unit roots, co-integration- error correction mechanism and tests for cointegration; causality – concept and tests; ARIMA modelling- Box-Jenkins's methodology; vector auto-correlation; problems with VAR modelling – applications.

#### Unit II: Dynamic Econometric Models and Panel Data Models

Autoregressive and distributed lag models- Koyak model; partial adjustment model; adaptive expectations; Almon approach to distributed-lag models; instrumental variable approach; paneldata - balanced and unbalanced panel; methods of estimation: fixed effects model and randomeffect model.

#### **Unit III: Simultaneous Equations Models**

Simultaneous equations models- Introduction and examples; The simultaneous equation bias and inconsistency of OLS estimators; The identification problem; Rules of identification- orderand rank conditions; Methods of estimating simultaneous equation system.

#### Unit IV: Software Application.

The aim of this unit is to introduce theoretical with practical knowledge in applied econometrics and as such the lecture sessions will include a number of illustrations with possible estimations given the statistical packages like Stata/E-Views/R.

#### **Basic Reading List:**

- 1. Maddala G. S. (1993). Econometric Methods and Applications. Edward Elgar Publishing Ltd.: UK.
- 2. Enders, W. (1995). Applied econometric time series. New York: Wiley
- 3. Wooldrige J. (2012). Introductory Econometrics: A Modern Approach. Cengage Learning: USA.
- 4. Baltagi, B. H. (2008). Econometric analysis of panel data. Chichester, UK: John Wiley & Sons
- 5. Brooks, C. (2002). Introductory econometrics for finance. Cambridge: Cambridge University Press
- 6. Gujarati D. N. (2009). Basic Econometrics. McGraw Hill: New Delhi.

#### Economics of Conflict, Peace and Development Course Code: ECO22305DCE

**Course Description:** To date, the study of conflicts has been dominated by political scientists, which prejudges the phenomenon as purely political. However, the use of economic theory and statistical evidence alongside the traditional case-studies can offer valuable analytical insightson the causes of inter- and intrastate conflicts and its effect on economic development. Studentsare introduced to models of conflict also.

**Course Objective:** To expose students to the use of economic theory and statistical evidence alongside the traditional case-studies to an understanding of inter- and intrastate conflicts and its effect on economic development.

#### **Course Outcome:**

- 1. Explore the economic causes and consequences of conflict and violence.
- 2. Analyze the role of economic policies and interventions in post-conflict reconstruction and peace-building.
- 3. Evaluate case studies of conflict and peace processes from around the world.

#### **Unit I: Conflict and Development**

Conflict Economics – definition, development and scope; peace as an assumption challenged; nature and costs of conflict; channels of conflict; causes of conflict - greed-grievance, horizontal inequalities and relative deprivation; conflict and millennium development goals

#### Unit II: Economics of Conflict: Micro Theories

Microeconomics of violent conflict – origin and definition; micro-theories – production possibilities and the guns versus butter trade-off; the rational choice model – elements of conflict; sources of violent conflict; game theoretic foundation of conflict; the bargaining model of conflict.

#### Unit III: Impact of Conflict at Micro Level

Welfare effects of conflict – impact on household welfare; channels of conflict – direct and indirect; poverty-conflict nexus – from conflict to poverty and poverty to conflict; household responses to conflict – different coping strategies; conflict and human capital accumulation – linking violent conflict and educational outcomes; the social geography of armed conflict

#### Unit IV: Conflict and Economic Welfare - The Kashmir Case

The Kashmir conflict – genesis and major developments since 1947; economics of uncertaintyand conflict in Kashmir- a macro-perspective; armed conflict and poverty; conflict as a consumption shock; tourism and conflict; militarization and land grabs.

#### **Basic Reading List:**

- 1. Anderton, C. H., & Carter, J. R. (2019). Principles of Conflict Economics: Cambridge University Press.
- 2. Bose, S. (2003). Kashmir: Roots of Conflict. Paths to Peace, New Delhi: Vistaar
- 3. Justino, P., & Verwimp, P. (2013). Micro-level dynamics of conflict, violence and development: A new analytical framework.
- 4. Justino, P., Brück, T., & Verwimp, P. (2013). A Micro-Level Perspective on the Dynamicsof Conflict, Violence and Development. Oxford University Press.

## SEMESTER – III J&K Economy

#### (4 Credit Course)

#### **Course No: ECO22306DCE**

**Course Description:** The course introduces the dynamic & challenging issues of Jammu & Kashmir at the disaggregated level. The emphasis of the course is on the overall socioeconomic environment influencing policy decisions in contemporary settings of Jammu & Kashmir.

**Course Objective:** To sharpen the analytical capability of the students, by highlighting an integrated approach to the functioning aspects of the J&K economy.

#### **Course Outcome:**

- 1. Study the unique economic challenges and opportunities in the Jammu and Kashmir region.
- 2. Analyze the impact of political and social factors on economic development in J & K.
- 3. Assess economic policies and initiatives aimed at promoting growth and stability in the region.

#### Unit I: Structure of J&K Economy

Basic features; economic reforms & agrarian transition – New Kashmir manifesto; Godbole committee report; nature of planning; demographic dividend & age pyramid.

#### Unit II: Macroeconomic Scenario

Composition of SGDP & employment; structural transformation; nature, causes & consequences of poverty, inequality, unemployment & inflation; structure of labor market; industrial policy (2021-30); trade and export policy (2018-28)

#### **Unit III: Basic Sectorial Issues**

Nature & scope of agriculture & industry; diversification of agriculture & cropping pattern; public distribution system – demand & supply dynamics; tourism, handicraft & energy sector; fragility & economic uncertainty; challenges of investment.

#### Unit IV: Finance and Banking

Structure of finance – revenue (tax & non-tax) & expenditure (plan & non-plan); Gadgil plan with special reference to J&K; J&K finance commission; budgetary deficits & FRBM act; nature & scope of banking.

#### **Basic Reading List:**

- 1. Effat Yasmin & Javaid Iqbal Khan. (2017). Perspectives on Jammu and Kashmir Economy. Bookwell: New Delhi.
- 2. Javaid Iqbal Khan. (2012). Jammu and Kashmir Economy. Directorate of Distance Education, University of Kashmir: J&K.
- 3. E. Mariam. (2013). State Intervention and Economic Development in J&K: Historical Roots and Structural Evolution. Jawaharlal Nehru University: New Delhi.
- 4. Ali Mehdi, Divya Chaudhry & Priyanka Tomar. (2019). Freedoms, Fragility & Job Creation: Perspectives from Jammu & Kashmir. Springer: Singapore.
- 5. J&K Economic Survey. (2021). Directorate of Economics & Statistics. Government of Jammu & Kashmir: J&K.
- 6. Godbole Committee Report. (1998). Economic Reforms for J&K. Government of J&K: Srinagar.
- 7. Planning Commission. (2003). State Development Report of Jammu & Kashmir. Government of India: New Delhi.
- 8. Sehar Iqbal. (2021). A Strategic Myth: Underdevelopment in Jammu & Kashmir. Tulika Book: India.

#### SEMESTER – III Demography

#### Course Code: ECO22307DCE

examined in relation to its economic determinants and consequences. In the latter part of the course we will shift our attention to the relationship between population and issues such as development, resource, population aging and health, economic growth, and the environment. **Course Objective:** The basic objective of this paper is to introduce the students with the basic demographic measures & techniques.

#### **Course Outcome:**

- 1. Understand the principles of population dynamics and demographic transition.
- 2. Analyze the impact of population growth, aging, and migration on economic and social outcomes.
- 3. Evaluate demographic data and projections for policy analysis.

#### **Unit I: Introduction**

Nature & scope of demography; phases of demography, methods & sources of demographic data – census & sample surveys (NFHS & DLHS); determinants of sex ratio, age structure, agepyramid & population aging

#### **Unit II: Demographic Theories**

Malthus theory of population; theory of optimum population; theory of demographic transition; theory of demographic dividend; basic theories of fertility & mortality

#### **Unit III: Demographic Analysis**

Basic determinants & measures of Fertility, Nuptiality, Mortality, Morbidity & Migration; methods of life-table construction

#### **Unit IV: Population Estimations and Development**

Basic measures of population projections & estimation; static & stationary population growth models; population policies; population & development – bone or bane; population & environment- debate; population and resource - linkages; population policies.

#### **Basic Reading List:**

- 1. Samuel H. Preston & et. al. (2003). Demography: Measuring & Modeling Population Processes. Blackwell: Oxford.
- 2. R. C. Chandna. (2017). Geography of Population: Concepts, Determinants & Patterns. Kalyani Publishers: India.
- 3. Asha A. Bhende & Tara Kanitkar. (2008). Principles of Population Studies. Himalaya Publishing House: India.
- 4. K. B. Pathak & F. Ram. (2015). Techniques of Demographic Analysis. Himalaya Publishing House: India.
- 5. Henary S. Shryock. (2001). Methods & Materials of Demography. Academic Press:London.
- 6. M. L. Jhingan & et. al. (2020). Demography. Vrinda Publication (P) Ltd.: India.
- 7. Hans Raj. (2019). Fundamentals of Demography. Surjeet Publications: India.
- 8. B. J. Donald. (2018). Principles of Demography. John Wiley: New York.

Note: Additional reading list is available with the concerned teacher.

#### (4 Credit Course)

#### SEMESTER – III Financial Markets Course Code: ECO22003OE

#### (2 Credit Course)

**Course Description:** This course introduces students from non- economic backgrounds to the process of evolution of the financial system. It is intended to provide a basic understanding about the working and functioning of Stock Exchange and its regulation.

**Course Objective:** To enable the students to understand the changing role of financial marketsin the process of growth and development.

#### **Course Outcome:**

- 1. Examine the structure and functioning of financial markets, including stock and bond markets.
- 2. Analyze investment strategies and portfolio management techniques.
- 3. Evaluate the role of financial intermediaries and the regulatory framework in financial markets.

#### **Unit I: Introduction**

Financial system – structure; classification of financial markets; instruments of money andcapital markets; derivatives market – concept and types

#### **Unit II: Stock Exchange**

Stock market – evolution; stock exchange in India – OTCEI, national stock exchange; Bombaystock exchange; stock exchange regulations - SEBI; working and functions

#### **Basic Reading List:**

- 1. Miskin F. (2015). The Economics of Money: Banking and Financial Markets, Addison Wesley Longmate: New York.
- 2. Hubbard G. R. (2007). Money: The Financial System and Economy. Addison Wesley: New York.
- 3. Bhole, L. M. (2002). Financial Institutions and Markets. Tata McGraw Hill: New Delhi.
- 4. Gupta, S. B. (2011). Monetary Economics. S. Chand and Co. Ltd.: New Delhi.
- 5. Khan, M. Y. (2009). Indian Financial System. Tata McGraw Hill: New Delhi.

#### SEMESTER – III International Economics Course Code: ECO22003GE

#### (2 Credit Course)

**Course Description:** This course deals with the basic theories of international trade and also covers topics like structure of BOP and foreign exchange market. Analyses of contemporary issues in international economics are also the subject matter of this course.

**Course Objective:** To provide students with basic conceptual knowledge that is essential for understanding and evaluation of important issues in international trade and finance.

#### **Course Outcome:**

- 1. Explore advanced topics in international trade and finance.
- 2. Analyze international trade agreements, trade policies, and their effects on global economies.
- 3. Evaluate the challenges and opportunities of international economic integration.

#### Unit I: Trade

An introduction to international trade; theory of absolute and comparative advantage; factor endowments theory; tariff and non-tariff barriers - meaning and types; cost and benefits of tariffs

#### Unit II: Finance

Balance of payments — meaning, structure, equilibrium and disequilibrium in BOPs; foreign exchange market — meaning, structure & functions; introduction to exchange rate systems; types of foreign exchange transaction; hedging, speculation and arbitrage.

#### **Basic Reading List:**

- 1. Carbaugh R. J. (2008). International Economics. Cengage Learning: New Delhi.
- 2. Salvatore D. (2011). International Economics. Wiley India: New Delhi.

#### SEMESTER – IV Economics of Growth Course Code: ECO22401CR

#### (4 Credit Course)

**Course Description:** This course deals with concepts and models of economic growth. It also explains the application of various models to the problems of economic growth. The course views economic growth in both domestic and international context and ends up with debates on the increasing interdependence of the world economy and its implications.

**Course Objective:** To acquaint students with the basic growth processes in the economy andmake them understand the applicability of models undertaken by different countries in the pathtowards growth.

#### **Course Outcome:**

- 1. Examine theories and models of economic growth and development.
- 2. Analyze the factors influencing long-term economic growth, including innovation and technology.
- 3. Evaluate policy interventions aimed at fostering sustained economic growth.

#### **Unit I: Economic Growth**

Growth: concepts and determinants (economic and non-economic); technical progress- embodied and disembodied; Hicks and Harrod's classification; production function approach to the analysis of growth; accounting for sources of growth; Harrod-Domar model; neo- Keynesian models; Kaldor and Pasinetti and Joan Robinson model.

#### **Unit II: Exogenous Economic Growth Models**

Solow model: impact of population, savings and technology; convergence hypotheses:  $absolute(\beta)$  convergence, conditional convergence, sigma convergence; golden rule of capital accumulation; golden rule of consumption; approaches to steady-state (numerical examples)

#### Unit III: Endogenous Economic Growth Models

New growth theory: AK models; Romer model of growth; learning by doing; Uzawa model of growth, Ramsey model of growth; optimal growth in a monetary economy; contribution of education to growth-Denison and production function approach.

#### Unit IV: Dependency and International Aspects of Growth Theory

Models of regional growth and differences – Prebisch and Seers; dependency theory and unequal exchange (A. G. Frank and Samir Amin); models of export led growth; neoclassical supply-side model; balance-of-payments constrained growth model and virtuous circle model; trade versus aid; import substitution and export promotion.

#### **Basic Reading List:**

- 1. Barro, R. J. and Sala-i-Martin. (2007). Economic Growth. Prentice Hall of India: New Delhi.
- 2. Jones, C. I. (2013). Introduction to Economic Growth. Viva-Books: New Delhi.
- 3. Jones, H. G. (1975). An Introduction to Modern Theories of Economic Growth: Thomas Nelson. USA.
- 4. Acemoglu, Daron. (2009). *Introduction to Modern Economic Growth*. Princeton University Press: USA.

#### SEMESTER – IV Public Economics Course Code: ECO22402CR

#### (4 Credit Course)

**Course Description:** This course lays the foundation required to understand the market failureand the role of government in the economy. In order to develop a broader understanding of the subject, the issues pertaining to public goods, externality, taxation and expenditure are dealt with.

**Course Objective:** To familiarize students with conceptual and theoretical issues in public economics and to acquaint them with basic of framework of public policies.

#### **Course Outcome:**

- 1. Understand the principles of public finance and government taxation.
- 2. Analyze government expenditure and budgetary policies.
- 3. Evaluate the efficiency and equity of taxation and public spending.

#### **Unit I: Fundamentals of Public Economics**

Public economics: conceptual framework; schools of thought; social welfare maximization - inability to obtain optimum welfare; imperfections, market failure, decreasing costs, uncertainty; non-existent and incomplete markets; role of government; externality theory; internalizing an externality; Coase theorem.

#### **Unit II: Public Goods**

Optimal provision of private and public goods; free rider problem; problems of allocating resources-preference revelation and aggregation; political economy- Lindahl pricing;mechanisms for aggregating individual preferences: Vickery–Clarke–Grove mechanism, Ledyard's method, Arrow's Impossibility theorem; Tiebout model.

#### **Unit III: Taxation**

Taxation and types; measuring fairness of tax systems; tax incidence; taxation and economic efficiency; dead-weight loss; theory of optimal taxation: optimal commodity and income taxes; Laffer curve; effect of taxation on labour supply and savings.

#### **Unit IV: Public Expenditure and Debt**

Public expenditure – Wagner's and Wiseman-Peacock hypothesis; pure theory of public expenditure; public debt-theories of public debt, debt sustainability; Ricardian equivalence, debt management techniques; financing of fiscal deficit.

#### **Basic Reading List:**

- 1. J. Gruber, (2016), Public Finance and Public Policy, MIT.
- 2. H. Rosen (2013), Public Finance. MIT Press.
- 3. J. E. Stiglitz (2015): Economics of Public Sector, Norton, New York.
- 4. Jean Hindriks and Gareth D. Myles (2006), Intermediate Public Economcs, MIT Press.
- 5. Amaresh Bagchi; Readings in Public Finance, Oxford University Press.
- 6. Jha, R. (1998), Modern Public Economics, Routledge London.
- 7. Musgrave and Musgrave (2005), Public Finance in Theory and Practice, Tata McGraw Hill, New Delhi.
- 8. A. B. Atkinson and J. E. Stiglitz, (1980); Lectures on Public Economics. Tata McGraw Hill, New York.
- 9. J. Cullis and P. Jones (1998), Public Finance and Public Choice, Oxford University Press. **Note:** Additional reading list is available with the concerned teacher.

#### SEMESTER – IV Environmental Economics Course Code: ECO22403CR

**Course Description:** This course is designed to provide a comprehensive understanding of issues involving the environment. It presents different economic perspective of environmentalsystems and their problems with special attention to the use, misuse, and overuse of environmental resources. Issues of sustainability, valuation of environmental services, theory of environmental regulation and global issues related to environment are dealt with.

**Course Objective:** To provide a comprehensive knowledge relevant to the economic analysis of issues involving the environment.

#### **Course Outcome:**

- 1. Explore the economic analysis of environmental issues and sustainability.
- 2. Analyze the use of economic instruments such as carbon pricing and cap-and-trade systems.
- 3. Evaluate the trade-offs between economic development and environmental conservation.

#### Unit I: Fundamentals of Environmental Economics

Environmental economics — meaning, scope and rationale; environment and the economy inter-linkages and trade-off; property rights — open access and common property resource; externalities as a source of market failure; public goods and bads, sustainability: concept and indicators.

#### **Unit II: Measurement of Environmental Values**

Concept and types of environmental value; valuation of benefits – methodological issue; defensive expenditure approach; hedonic pricing approach; travel cost approach; contingent valuation technique.

#### Unit III: Economics of Environmental Regulation

Rationale for regulation; Coasian approach; Pigovian taxes; command and control methods; economic incentives — effluent and emission taxes; tradable pollution permits; liability laws.

#### Unit IV: Trade, Environment and Climate Change

International trade and environment; trade and domestic pollution; trans-boundary pollution, climate change — scientific evidence and its ecological impact; the economics of global warming: basic theoretical concepts and framework of analysis; the economic debates and policy implications of global warming — the 'business as usual' approach (BAU), gradualist approach; and precautionary approach.

#### **Basic Reading List:**

- 1. Hanley N. (1999). Environmental Economics in theory and Practice. Macmillan India Ltd.: New Delhi.
- 2. Singh K. and Shishodia A. (2011). Environmental Economics: Theory and Application. SAGE Publication India Pvt. Ltd.: New Delhi
- 3. Acharya R. (2013). Trade and Environment, Oxford University Press, New Delhi
- 4. Batacharya R. N. (2001). Environmental Economics: An Indian Perspective. Oxford University Press: New Delhi.
- 5. Pearson C. S. (2000). Economics and Global Environment. Cambridge University Press: USA.
- 6. Kolstad, C. D. (1999). Environmental Economics. Oxford University Press. New Delhi.
- 7. Hussain, A. M. (1999). Principals of Environmental Economics. Rutledge: London.

#### SEMESTER – IV Issues in Indian Economy Course Code: ECO22404CR

#### (4 Credit Course)

**Course Description:** Keeping in view the scope for alternative approaches, the emphasis of the course is on overall social, political and economic environment influencing policy decisions. To develop all these themes within a sectoral analysis framework, the course is divided into specific units dealing with various issues of interest and contemporary relevance.**Course Objective:** To sharpen the analytical faculty of the student, by highlighting an integrated approach to the functional aspects of the Indian economy.

**Course Objective:** This course is designed to acquaint students with a broader understanding of issues facing the Indian economy in the domain of policy and practice.

#### **Course Outcome:**

- 1. Investigate contemporary economic challenges and issues specific to the Indian economy.
- 2. Analyze policy responses to issues such as unemployment, inflation, and income inequality in India.
- 3. Evaluate the impact of economic reforms on various sectors of the Indian economy.

#### Unit I: Agriculture

Agricultural policy-costs and prices; agricultural prices and PDS; impact of public expenditureon agricultural growth; agricultural taxation; sustainability of agriculture and food security in India; land acquisition.

#### Unit II: Industry and trade

Structure and composition of Industry – issues of concentration; large vs small industry; industrial location; small scale reservation policy; trends and patterns of industrial growth; foreign trade regime; protection and foreign competition; productivity; import substitution versus export; competitiveness; effect on export competitiveness.

#### Unit III: Poverty, Inequality and Inflation

Poverty and exclusion; NREGA; social security for unorganized sector; unemployment— types, causes and consequences; population pressure—economic effects; inequality—extent, consequences and remedies; regional imbalance – extent, consequences and remedies; parallel economy in India – demonetisation

#### Unit IV: Infrastructure and Development

State of infrastructure – reforms, restructuring, pricing and regulation; promoting investment in infrastructure – public and private partnership; sectoral issues – energy, transport, telecom and urban infrastructure and FDI; human development indicators – review of change since early fifties, wide regional variations; environmental protection – sustainable development goals.

#### **Basic Reading List:**

- 1. Pullin, N. (2015). Economic Development of India (Critical Concepts in Economics). Routledge: London & New York.
- 2. Krueger, A. (2003). Economic Policy Reforms and the Indian Economy. Oxford University Press: USA.
- 3. Dandekar, V. M. (2004). The Indian Economy (1947-97): Transforming Traditional Agriculture Vol. I.: New Delhi.
- 4. Kurian, C. T. (1978). Poverty Planning and Social Transformations An Alternative in Development Planning. Allied Publishers: New Delhi.
- 5. Panagariya, A. (2008). India the Emerging Giant. Oxford University Press: USA.

#### SEMESTER – IV Research Methodology Course Code: ECO22405DCE

#### (4 Credit Course)

**Course Description:** This course attempts to introduce students to the foundations of social science research in general and economics in particular. It attempts to make students understand various statistical tools required for complication, tabulation and presentation of primary as well as secondary data. It also discusses the various steps for preparing a research/project report.

**Course Objective:** To acquaint students with a basic understanding required for carrying the research work in social science in general and economics in particular.

#### **Course Outcome:**

- 1. Develop advanced research skills, including research design and data collection.
- 2. Learn to conduct literature reviews and write research proposals.
- 3. Apply research methods to design and execute an independent research project.

#### **Unit I: Introduction**

Meaning of research in economics; types of research; introduction to research philosophy and research methodology, research methods vs methodology; defining and formulating the research problem - development of working hypothesis.

#### Unit II: Research Design and Methods

Research design: basic principles, need and features; important concepts relating to research design: observation and facts, laws and theories, prediction and explanation, induction, deduction; development of models; developing a research plan- exploration, description, diagnosis, and experimentation.

#### Unit III: Data Base, Data Selection, Data Processing and Sampling

Methods of sampling and sampling design; data- types; data collection tools; interviewschedules, questionnaire design; sampling errors; scaling techniques; data smoothing techniques; analyzing qualitative data; introduction to SPSS. data sources- national and international; IMF and WDI data base, UNCOM Trade, RBI-Hand Book of Statistics on IndianEconomy, NSSO reports, ASI reports, census data, NFHS reports, RBI bulletin, Economic Survey etc. Data extraction: NSSO and ASI unit level data.

#### Unit IV: Research Results Reporting, Referencing Techniques and Plagiarism:

Types of research reports, structure of a research report, presentation of tabular data and figures; preparing bibliography, foot notes and annexure; style of reference writing; ethics in research; plagiarism in research; avoiding plagiarism; introduction to software packages of detecting plagiarism.

#### **Basic Reading List:**

- 1. Don Ethridge.(2004) Research Methodology in Applied Economics: Organizing, Planningand Conducting: Second Edition, Blackwell Publishing.
- 2. Kothari, CR (1995) Research Methodology: Methods and Techniques, Whishaw Prakashan (Wiley Eastern Ltd), New Delhi.
- 3. Johnson, Glenn Leroy (1986) Research Methodology for Economists: Philosophy and Practice: Macmillan.
- 4. Ranjit Kumar. (2010) Research Methodology: A Step by Step Guide for Beginners; 2/e; Pearson Education.

#### SEMESTER – IV Indian Financial System Course Code: ECO22406DCE

#### (4 Credit Course)

**Course Description:** This course introduces the macroeconomic dimensions of **Indian Financial System.** It will attempt to understand the crucial role played by financial markets and intermediaries in the development of Indian economy. The working and functioning of Stock Exchange and its Regulations are also the subject matter of this course.

**Course Objective:** To acquaint students with understanding of working and functioning of Financial System and the role of Indian Financial System in development of different sectors of the economy

#### **Course Outcome:**

- 1. Understand the structure and functioning of the Indian financial system.
- 2. Analyze the role of financial institutions and regulatory bodies in India.
- 3. Evaluate financial innovations and trends in the Indian financial sector.

#### **Unit I: Introduction**

Indian financial system — an overview; macroeconomic dimensions of financial system; major issues in Indian financial system; financial sector reforms in India — a review; Basel reforms — implication for Indian banking

#### Unit II: Financial Markets

Structure, functions and organizations; money market – features, instruments and limitations; capital market – instruments and importance; un-regulated credit markets—types, functions and limitations.

#### **Unit III: Financial Intermediaries**

Financial intermediaries – structure, functions and importance; banking financial intermediariestypes; commercial banking — liabilities and asset management; RBI's monetary policy and credit controls; non–banking financial intermediaries – types; development banking--structure and functions

#### Unit IV: Stock Exchange and its Regulations

Stock exchange – importance and methods of trading; organization and working of-OTCEI, national stock exchange, Bombay stock exchange; SEBI – working and functions; recent regulation

#### **Basic Reading List:**

- 1. Bhasin, N. (2009). Monetary Banking and Financial Developments in India. New Century Publications: New Delhi.
- 2. Gordon E. and K Natarajan. (2009). Financial Markets and Institutions, Himalayan Publishing House: New Delhi.
- 3. Reddy Y. V. (2001). Monetary and Financial Sector Reforms in India. UBS Publishers and Distributors Ltd.: New Delhi.
- 4. Machiraju, M. R. (1999). Indian Financial System, Vikas Publishing House, New Delhi.
- 5. Surry, M. M. (2004). Indian Economy in 21st Century. Tax Foundation of India: New Delhi.
- 6. Bhole, L. M. (2009). Financial Institutions and Markets. Tata McGraw Hill Comp: New Delhi.
- 7. Khan, M. Y. (2015). Indian Financial System. Tata McGraw Hill: New Delhi.

#### SEMESTER – IV Tourism Economics Course Code: ECO22407DCE

#### (4 Credit Course)

Course Description: In this paper we focus on the definitions, concepts and frameworks that underpin the study of tourism to provide: i) a basic understanding of how tourism is defined;

ii) a comprehension of the issues associated with the academic and practical study of tourism as a concept; iii) an appreciation of the components which when combined comprise a conceptual framework for tourism; v) a knowledge of the role of markets and basic supply-sideand demand-side issues; vi) the operational framework for tourism supply and demand as embodied in the Tourism Satellite Account (TSA); and vii) knowledge and understanding of accommodation & attraction structure strategies in terms of quality.

**Course Objective:** To understand the theory and practice of tourism management at different levels within the demand and supply framework.

#### **Course Outcome:**

- 1. Study the economic aspects of the tourism industry, including its impact on local economies.
- 2. Analyze tourism policy, marketing strategies, and sustainable tourism development.
- 3. Evaluate the economic benefits and challenges associated with tourism.

#### **Unit I: Introduction**

Nature & scope of tourism; tourism system – components, elements & models(Neil & Leiper's whole tourism system model).

#### **Unit II: Tourism Demand**

Determinants and measurement of tourism demand; tourism consumer behaviour; measuring & modelling of tourism demand; forecasting tourism demand.

#### **Unit III: Tourism Supply**

Determinants & measurement of tourism supply; determinants of tourism sector – attractions; accommodations; events management; intermediaries & transportation; public sector & policy

#### **Unit IV: Impact of Tourism**

Economic, environmental & socio-cultural impact of tourism; principles & benefits of sustainable tourism; tourism & development planning

#### **Basic Reading List:**

- 1. Guido Candela & Paolo Figini. (2012). Economics of Tourism Destinations. Departmentof Economics, University of Bologna. Springer: Italy.
- 2. Norbert Vanhove. (2005). Economics of Tourism Destinations. Elsevier Butterworth-Heinemann: London.
- 3. John Fletcher & et al. (2018). Tourism: Principles & Practices. Pearson: London.
- Leonard J. Lickorish. (1997). *Introduction to Tourism*. Reed Educational and Professional Publishing Ltd: Singapore.

#### Gender and Development

#### Course No: ECO22408DCE

#### (4 credits Course)

**Course Description:** This course attempts to introduce students towards gender dimension of economic development and its specific relevance in Indian context. It also discusses the measures and indices of measuring gender sensitive development.

**Objectives:** To acquaint students with a basic understanding of issues confronting women at various levels economic development.

#### **Course Outcome:**

- 1. Understand the theoretical frameworks of gender and its role in economic development, with a focus on the Indian context.
- 2. Analyze women's participation in the labor market, wage differentials, and the valuation of their work in economic terms.
- 3. Evaluate gender-sensitive policies, governance frameworks, and empowerment initiatives aimed at promoting gender-inclusive development.

#### **Unit I: Introduction**

Gender — Conceptual and theoretical Framework; Gender stereotyping in Work- Undervaluation of women's work; Gender discrimination—Role of culture and Religion; Gender perspectives of development; Measures of development-GDI and GEM; Feminisation of Economy; Feminisation of poverty; Role of women in Economic development.

#### Unit II: Women and Labour

Concept of women's work; Valuation of productive and non productive work; Visible and invisible work; paid and unpaid work economically productive and socially productive work; Gender sensitive national Income estimation; Women in labour market; Factors affecting female entry in labour market; Gender and wage differentials.

#### **Unit III: Women's access to resources**

Women Work and Decision Making; Female work- participation rate and their Economic status in developing countries; Impact of technological development and modernization on women's work participation in various sectors; Factors affecting decision making by women; Property rights, access to and control over economic resources; Assets power of decision making at household and community level.

#### Unit IV: Gender Development policy in India

Gender Development Policy in India; Mainstreaming gender into development policies; Gender sensitive governance; Paradigm shifts from women's well being to women's empowerment; Democratic decentralization (Panchayats) and women's empowerment in India; National commission of women; Committee on the Elimination of discrimination Against Women (CEDAW); National policy for the empowerment of women (2001); Gender budgeting.

#### **Basic Reading List:**

- 1. Raka R. (2012), Handbook of Gender, Oxford University Press.
- 2. Pal, B., Bholanath, Vasular (2011), Gender and Discrimination (Health, Nutritional status and Role of women in India Oxford University Press.
- 3. Agarwal, B. (2010), Gender and Green Governance: —The political economy of women's presence within and beyond Community Forestry, Oxford University Press.
- 4. Kochhar K., S. Das and N. Kumar and S. J. Chandra, (2015), Women workers in India: Why so few among few, IMF working Paper, Asia and Pacific Department.
- 5. Huyers (2016), Closing the Gender Gap in agriculture, —Gender Technology and Development Sage Journal, Volume 20 (2), pp. 105-116.
- 6. Twelfth Five Year Plan 2012-17, Planning Commission, Government of India.

#### **Project Work**

#### Course Code: ECO22409DCE

Project Work shall be Discipline Centric (DSC) to be carried out under the supervision of concerned teacher of the department. The project work shall be submitted in the form of a typed dissertation limited to a maximum of 100 pages. The report will be evaluated by one internal and one external examiners followed by presentation of the work and viva voce. The project report will carry 100 marks (04 Credits) comprising 75 marks (03 Credits) for dissertation and25 marks (01 Credit) for presentation and viva voce examination.

#### **Course Outcome:**

- 1. Apply the knowledge and skills acquired during the program to a real-world research project.
- 2. Conduct independent research, collect data, and analyze findings.
- 3. Present research results in a comprehensive project report.

#### (4 Credit Course)

#### SEMESTRER – IV

#### **Banking and Finance in India Course Code: ECO22004OE**

(2 Credit Course)

**Course Description:** This course covers the study of the banking and Public Finance. It intends to familiarise students with non- economic background to the conceptual framework of banking and finance in India and the role played by financial institutions in sectoral development of India since their evolution.

**Course Objective:** To acquaint with the knowledge of various types of banks working in Indiawith each one having a different role to play for the development of the economy.

#### **Course Outcome:**

- 1. Explore the banking and financial sector in India, including the role of banks and financial institutions.
- 2. Analyze banking regulations, financial products, and services in the Indian context.
- 3. Evaluate emerging trends and challenges in Indian banking and finance.

#### Unit I: Banking in India

Commercial banks – growth and regional distribution; banking legislation – 1949; nationalization of commercial banks; co-operative banks – growth, structure and functions; regional rural banks – role and functions; NABARD, IDBI – structure, working and role

#### **Unit II: Indian Public Finance**

Union finance – central sources of income; trends in revenue and expenditure; state finance – sources of state revenue; expenditure of state governments; public debt since 1951; types of budgets

#### **Basic Reading List:**

- 1. Paul, R. R. (2015). Monetary Economics. Kalyani Publishers: New Delhi.
- Mundel, S. (1999). Public Finance Policy Issues for India. Oxford University Press: New Delhi.
- 3. Lekhi, R. K. (2010). Public Finance. Kalyani Publishers: New Delhi.
- 4. Bhasin, N. (2009). Monetary Banking and Financial Developments in India. New Century Publications: New Delhi.

#### Public Finance Course Code: ECO22004GE

#### (2 Credit Course)

**Course Description:** This course is designed for students of sister departments. It intends to develop basic understanding of fundamental concepts and theories of public finance and publictools among students.

**Course Objective:** To develop a basic understanding among students about public finance andits importance in day to day matters of an economy.

#### **Course Outcome:**

- 1. Examine fundamental concepts in public finance, including public goods and externalities.
- 2. Analyze government revenue sources and expenditure priorities.
- 3. Evaluate fiscal policy and its impact on economic stability and social welfare.

#### Unit I: Fundamentals of Public Finance

Public finance — definition, scope and schools of thought; role of government– allocation, distribution and stabilization; characteristics of public goods; merit goods; free rider problem – market failure externality theory; internalizing an externality.

#### Unit II: Public Expenditure and Taxation

Budget – types and tools of budget analysis; public expenditure – concepts; Wagner's and Wiseman-Peacock hypotheses, public revenue – sources and types; taxation – types and incidence; goods and services tax (GST).

#### **Basic Reading List:**

- 1. Musgrave and Musgrave. (2005). Public Finance in Theory and Practice. Tata McGraw Hill: New Delhi.
- 2. Stiglitz J. E. (2015). Economics of Public Sector. Norton: New York.
- 3. Lekhi, R. K. (2010). Public Finance. Kalyani Publishers: New Delh.
- 4. Gruber, J. (2016). Public Finance and Public Policy. MIT: USA.
- 5. Rosen H. (2013). Public Finance. MIT Press: USA.

Note: Additional reading list is available with the concerned teacher.