

Ph. D. Programme in Economics

The course structure of Ph. D. has been designed to impart research scholars in-depth research and analytical skills. This enhances their employability in industry and other professional fields. This provides students with skills enabling them to critically investigate complex research questions and test the validity of existing theories in different branches of the subject. It also aims to expand the student's knowledge in their respective fields of research. The programme inculcate skills of research and report writing , besides improving their presentation skills.

After the completion of Ph. D. programme, the students should:

- Have a thorough knowledge of theoretical and empirical literature of their respective areas.
- Be able to demonstrate originality in the application of knowledge, with comprehensive understanding of the statistical and econometric methods used to create and interpret their research.
- Be able to work independently in the planning and conducting of research besides drawing valid inferences and policy implications from their research output.
- Be able to understand the basics of academic writing , enabling them to write reports succinctly and bring them out in different forms of publication.

Syllabus of Ph.D Course

Course Title: Advanced Research Methodology for Economics

Course Code: 01-PPh.D Eco-18

Course Objective: The fundamental objective of the course is to prepare the students to identify research gaps and investigate intriguing research questions in an objective manner based on rigorous data analysis.

Expected Outcome:

After going through this course, the students should be able to understand the basic philosophy of science and different schools of thought on scientific method. The students will be familiarized with the rules of formal logic, models of scientific explanation, and the limitations of their applicability in Economics. The students will understand how to write research proposals, project proposals, and a thesis. Besides, they will be exposed to basic computer skills and latest statistical software packages.

Course Description: The course covers Research Methodology, Data Collection and Analysis, Regression Analysis, Computer Applications and Report Writing.

Contents

UNIT I: Research Methodology

Meaning of Research, Types of Research, Objectives and Significance of Research, Criteria of Good Research, Constituents of Research Methodology, Identification of Research Problem, Research Process, Research Design, Features of Good Research Design, Literature Review and its Importance in Research, Basic Steps in Framing a Research Proposal.

UNIT II: Data Collection and Analysis

Methods of Sampling and Sampling Design, Types of Sampling, Methods of Data Collection: Census, Survey, Case Study Method, and Participatory Rural Appraisal; Criteria and

Characterization of a Good Sample, Errors in Data Collection: Sampling Errors and Non-Sampling Errors; Testing of Hypothesis: Concept and Procedure of Hypothesis Testing; Parametric and Non-Parametric Test.

UNIT III: Simple and Multiple Regression Analysis

Concept of population and sample regression function, Linear regression model – assumptions and consequences of their violation (Multicollinearity, Heteroscedasticity, and Autocorrelation), estimation (through OLS approach) and properties of estimators, Gauss-Markov Theorem, Hypothesis testing. Functional forms of regression models, Multiple Regression Model – Assumptions, and estimation, Concept of Coefficient of Determination for Linear and Multiple Regression Model (r^2 , R^2 , and Adjusted R^2).

UNIT IV: Time Series and Panel Regression

Stationary and non-stationary time series, White noise process, Random Walk Model, Unit roots and Co-integration, Dickey Fuller Test, Engle-Granger test, Panel Regression analysis – Random and Fixed Effect, Hausman Test. Dummy variable regression Models –interaction effects and structural breaks using dummy variable model.

UNIT V: Report Writing and Computer Applications

Report Writing: Layout of Research Paper and Thesis, Introduction to Referencing Styles, Especially APA; Use of Computer Applications in Economics: Introduction to Ms Office: Ms Word, Ms PowerPoint, and MsExcel, Introduction to Statistical Software Packages (STATA and Eviews).

Course Delivery

- Lectures
- Presentations
- Group Discussions

Assessment

Exam (100 Marks)

Course Title: Agricultural Economics

Course Code: Ph.D-EC-02-18

Course Objectives: The Objective of this paper is to acquaint students with developments in Agriculture, production and Productivity, models for agricultural development, price and marketing of agricultural products and policy issues that are relevant to Indian agricultural economics. This gives the students understanding about theoretical developments in agricultural economics.

Expected Outcome: Upon successful completion of this course, students will understand and appreciate the significance of relevance of the economic principles of scarcity, choice, trade-off, opportunity cost; effectiveness and eco-effectiveness, efficiency and eco-efficiency; anthropocentric and ecocentric thinking; price and price signals; economic systems . Besides, the students will be able to apply the basic concepts to predict likely changes in product prices and quantities and to understand the implications.

Course Description: This course includes various aspects of development, agricultural centric development and focuses on agricultural state of India.

Contents:

UNIT I

Role of agriculture in economic development, Decline in the importance of agriculture with economic growth and structural change, Production function, input-input and product- product relationships, Equilibrium of the capitalist farm and peasant family farm, Equilibrium of share-tenant farm and its efficiency.

UNIT II

Nature and Type of Risk and Uncertainty in Agriculture, Methods used by farmers and Government policies for reducing risk and uncertainty, Nature of supply and demand for agricultural products and structure of agricultural markets, Instability of agricultural prices; need and objectives of agricultural price policy, Schultzian theory and role of technological change in modernization of traditional agriculture.

UNIT III

Natural Resource Base of Indian Agriculture, Agrarian Structure in India, Agricultural growth in India since 1950-51, Capital Formation in Indian Agriculture, Agricultural Inputs (Seeds, Fertilisers, Irrigation), land reforms in India, Progress of Green revolution in India and its impact on production, rural employment and income distribution.

UNIT IV

Nature of return to scale and farm size productivity relationship in Indian agriculture, Terms of trade of agricultural sector in India since independence, Agricultural Price Policy in India, WTO & Indian Agriculture, and Trends in Agricultural Trade in the context of the reforms.

UNIT V

Agricultural Credit in India: Sources, problems and government policies since independence, Recent initiatives in improving access to credit in agriculture, Liberalization and Indian Agriculture, Contract Farming, Farmer Distress and Suicide.

Course Delivery

-Lectures

-Presentations

-Group Discussions

Assessment

Exam (100 Marks)

Course Title: Open-economy Macroeconomics

Course Code: Ph.D.-EC-03-18

Course Objectives: To acquaint the scholar about growth and business cycles especially in an open economy context. The course would help scholars to gain advanced knowledge regarding the role of various types of financial markets in the contemporary economic systems. Besides, special emphasis will be laid upon the policy issues facing the national and global economy pertaining to international trade.

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

- Recognise key concepts, theories and models of macroeconomics
- Apply macroeconomic tools to the analysis of a variety of real world events, empirical trends and policy
- Communicate concepts, graphically, mathematically and in writing, to a professional standard
- Evaluate real world events and illustrate their arguments in terms of relevant macroeconomic models

Course Description: This course covers theories of International Trade, exchange rate and also covers policy issues.

Contents:

Unit I: Theories of International trade

Hecksher-Ohlin theorem, Leontief's Paradox, Factor-Price Equalization, Stolper-Samuelson theorem, Rybczynski Theorem, Intra-Industry Trade: Product cycle, economies of scale, imperfect competition, and Linder Hypothesis.

Unit II: Determination of exchange rate

Foreign exchange market; Demand for currencies- A simple portfolio model, Capital mobility, interest rates and expectations; Monetary theory of the exchange rate, Exchange rate equilibrium with rational expectations.

Unit III: The open economy

The specie–flow mechanism Imperfect capital mobility: fixed exchange rate, Imperfect capital mobility: floating exchange rate; Trade balance and the Marshall–Lerner condition; Mundell–Fleming–Tobin model- Fixed exchange rate and Floating exchange rate.

Unit IV: Policy issues

International interactions, International monetary system, International transmission of shocks, Policy coordination; Monetary union and optimal currency areas; Dynamic inconsistency- the rule vs discretion debate, Tylor rule. Rational Expectations, Lucas Imperfect information Model.

Unit V: Exchange rate policy

Bretton woods system operation and Collapse; Trilemma configuration. Exchange rate versus price level targets and output stability, Credibility and speculative attacks, Benefits of having one's own currency, Weak Currency –original sin.

Course Delivery

-Lectures

-Presentations

-Group Discussions

Assessment

Exam (100 Marks)

Course Title: Industrial Economics

Course Code: Ph.D.-EC - 04 -18

Course Objectives: The objective of this course is to provide basic and advanced knowledge regarding the key concepts in industrial economics. The course will acquaint the scholars about market structure and various approaches to measuring industrial performance. A significant portion of this course will be dealing with reforms and recent patterns of growth in Indian industry. Besides, special focus will be given to relevant available national data sources pertaining to topics in this course. Thereby, the research scholars will be enabled to identify research gaps in the light of available data for empirical analysis.

Expected Outcome:

Having successfully completed this module you will be able to:

- Demonstrate knowledge and understanding of the nature of strategic competition and its implications for policy
- Demonstrate knowledge and understanding of a set of analytical techniques which can be applied to a variety of economic (and non-economic) problems.

Course Description: This course covers market structure, industrial performance, India's Agricultural State,

Contents:

Unit-I: Market Structure

Concept of firm, Features of perfect and imperfect competitive markets, Market structure and profitability, Market structure and innovation, theories of industrial location – Weber and Sargent Florence; Constraints on growth of a firm, and Relevant data sources for empirical analysis and also covers topics related to industrial labour in India.

Unit-II: Industrial Performance

Various approaches to measuring industrial performance and efficiency: Profitability – meaning, measurement and its determinants; labour productivity – meaning, determinants and its

measurement; Total Factor Productivity – meaning, measurement, and determinants; Tobin's Q Ratio, meaning, determinants, and measurements, Situation in Indian Industry, and Relevant data sources for empirical analysis.

Unit-III: Labour Turnover

Meaning, determinants, and measurements of labour turnover; Effect of labour regulations on labour turnover, Impact of labour turnover on firm efficiency and profitability, Trends in labour turnover in the Indian industry; Relevant data sources for empirical analysis

Unit-IV: Reforms and growth in Indian Industry

Industrial reforms and Pattern of industrial growth in India in the post-independence period, Employment generation, output growth, and pattern of wages post New Industrial Policy 1991, Small scale industries – definition, role, policy issues, and performance; Relevant data sources for empirical analysis.

Unit-V: Industrial Labour in India

Structure of Industrial labour in India – regular labour vs. contractual labour; Wage differential, Issues related to contractual labour in India, Labour legislations and current debate on it, Recent labour law reforms, and Social security; Relevant data sources for empirical analysis.

Course Delivery

- Lectures
- Presentations
- Group Discussions

Assessment

Exam (100 Marks)

Course Title: Public Economics

Course Code: Ph.D. –EC-05-18

Course Objectives: The Course aims to equip the Researcher with focused and relevant knowledge about the theoretical and empirical developments in Public Finance and to give students a thorough understanding of the principles of public Economics that apply to Macro Economic issues Like Inflation, Indian Tax Policy, Issues in the social Sector, and Public finance system in view of Indian Budget. Procedures connected to Horizontal and vertical Devolution in view of rate of Unemployment and Growth.

Expected Outcome:

On completion of the course students would be able to:

- Understand the sources of finance both public and private, demonstrate the role of government to correct market failures and possible advantage of public financing.
- Attain the advantages and knowledge of public investments and other government expenditures. Understand the causes of growing public expenditures for various programmes and policies within and outside the country.
- Understand the possible burden, benefits and distribution of various types of taxes among various classes of people, know the general trend and impact on general welfare and arouse them to suggest good and bad tax system.
- Understand the needs of public borrowing from all possible sources to meet necessary public investment/expenditures. Also be alerted to find sources for repayment.
- Deliver effectively the preparation of budget and how they are passed in the house. Understand the changes in size and flexibility of state and central budget along with the role played by Finance Commission.
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Course Description: This course covers various aspects of Public Economics, issues in Social Sector and Public Policy.

Contents:

Unit -I: Issues in Macro Economics

Definition and measurement of inflation, Types of inflation, Impact of inflation, Measures to control Inflation. Monetary and Fiscal Policies: Objectives, Instruments. Inflation, Measurement of Inflation: WPI & CPI in India- System of weighting and issues in computation, Monetary Growth, Rate of interest and Inflation, Inflation Targeting, Patterns & trends of unemployment,

Unit- II : Indian Tax Policy

Features and Assessment of The Indian Tax System, Role of Taxation (Tax Policy), Role of public Borrowing in mobilization of Resources, External Finance, Grants Vs Foreign Loans, Role of deficit financing in mobilization of resources, Surpluses of the public Enterprises, Fiscal and monetary policy conflicts. , Empirical testing of the determinants and impacts of inflation

Unit- III : Issues in Social sector and Public policy

Social Sector - Theoretical Paradigms : Approaches & Definition, Theories of Social Sector: Social Exclusion & Inclusion, Social Development Index , Human Resource Development & Human Development : Differences and Linkages, Measurement of Various Forms of Human Development – Special characteristics of Education, Health, Nutrition, Environment, Marginalized Groups, Women and Social Development and Child Development.

Unit-IV: The Public Budget and Federal Finance

The Kinds of Budget, Classification of Budgets: Economic Classification and Functional Classification, Performance and Programme Budgeting System (PPBS), Zero-Base Budgeting, Balanced Budget-Arguments for Balanced Budget, Arguments against Balanced Budget, The Balanced Budget Multiplier, Fiscal Policy and Stability, Fiscal Policy and Economic Growth, Methods or process of financial Administration in India, Public Borrowings, Sources of public borrowing in India.

Unit-V: Wages and Unemployment

Business cycle- features, phases, causes and consequences, Wage rigidity and structural unemployment, Relationship between Inflation and unemployment in closed and open economy, Monetary and Fiscal policies as Stabilizers, Fiscal Road map and debt relief to the states. Fiscal Consolidation, Agricultural Taxation In India-A New system of Agricultural taxation.

Course Delivery

-Lectures

-Presentations

-Group Discussions

Assessment

Exam (100 Marks)

Course Title:Recent Advances in Micro-Macro Economic Theory

Course Code: Ph.D. EC-6-18

Course Objectives: The objective of this course is to expose the research scholar to ample formal training in Advanced level Micro and Macro-economic Theory so that they are well equipped to pursue subsequent studies in different specialized areas of interests. The course is also to deal with economic behaviour at the aggregate level. It is designed in such a way which will equip the students with broad features of the behaviour of macroeconomic situations in an economy too.

Expected Outcome:

- Explain how competitive markets organize the allocation of scarce resources and the distribution of goods and services.
- Describe the various types of markets and compare their efficiency
- Relate the basic economic theory and principles to current microeconomic issues and evaluate related public policy
- Relate the basic economic theory and principles to current microeconomic issues and evaluate related public policy
- Use economic model such as the aggregate supply/aggregate demand model and describe the interrelationships among prices, income and interest rates as they affect consumption, saving and investment.
- Analyze fiscal and monetary policy decisions to counter business cycle swings by using macro-economic models.

Course Description:

Contents: This course covers recent developments in Consumer Behaviour, and also macroeconomic policy .

Unit I

Recent Developments in Consumer Behaviour: Utility and Indifference Curve Approach, Income Effect and Substitution Effect: Slutsky and Hicks; Revision of Demand Theory by Hicks; Ordinary and Compensated Demand Curve, Applications of Indifference Curve Analysis.

Unit II

Production, Costs and Factor-pricing: Production Function: short period and long period; Elasticity of Substitution; Technical Progress and Production Function; Equilibrium of a firm, Economies and Diseconomies, Modern Cost Theory, Elasticity of Technical Substitution and factor shares, Demand for labour: Marginal productivity theory.

Unit III

Market Forms and Theories of firm: Monopolistic competition; Oligopoly: Chamberlin Model, Stackelberg Model; Kinked Demand Curve Model: Cartels and Price Leadership Models. The marginalist controversy and critical analysis of marginal analysis; Hall and Hitch Report and average cost pricing principle; Baumol's Sales revenue maximisation model; Marris model of managerial enterprise; Williamson's model of managerial discretion.

Unit IV

The goods and labour market: Composition of GDP; demand for goods; and determination of equilibrium output. Financial market: demand for money; determination of interest rate; and equilibrium. Goods and financial Markets: IS-LM model, AS-AD model; Natural rate of unemployment and Phillips Curve; Adaptive and Rational Expectations Hypothesis

Unit V

Macroeconomic Policy and Open Economy: Monetary and Fiscal Policy- Targets and Instruments, Theories of Business-cycles: Schumpeter, Kaldor, Samuelson and Hicks, Control of Business Cycles- Relative Efficacy of Monetary and Fiscal Policies. Mundell-Flemming Model and Implications of fiscal and monetary policies.

Course Delivery

-Lectures/Presentations

-Group Discussions

Assessment

Exam (100 Marks)