SAVITRIBAI PHULE PUNE UNIVERSITY
DEPARTMENT OF ECONOMICS

REVISED SYLLABUS FOR M.A. ECONOMICS
CREDIT SEMESTER COURSE-2017

Syllabus for M.A Part I Semester I, II and M.A Part II Semester III, IV to be started from July 2017.

1. There will be a total of FOUR courses in Semester I and II each for M.A in Economics. The students will have THREE Core courses and will have to select ONE Non-Core course in Semester I and II each.

2. There will be a total of FOUR courses in Semester III and IV each. In Semester III the students will have TWO Core courses and will have to select ONE EACH from the TWO Non-Core courses (I & II). In Semester IV the students will have to take THREE core courses and ONE non-Core course.

M. A Part I (Sem. I and II) and Part II (Sem. III and IV) - Each course will have FOUR credits. Syllabus only for University Department of Economics
### Course Structure of MA Economics Part I and Part II Semester Wise

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Semester I</th>
<th>Course No.</th>
<th>Semester II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Core</td>
<td></td>
<td>Core</td>
</tr>
<tr>
<td>EC- 102</td>
<td>Public Finance- I</td>
<td>EC- 202</td>
<td>Public Finance – II</td>
</tr>
<tr>
<td>EC- 103</td>
<td>International Economics-I</td>
<td>EC- 203</td>
<td>International Economics – II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non- Core</th>
<th>Non-Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC- 104</td>
<td>Basic Statistics</td>
</tr>
<tr>
<td>EC- 105</td>
<td>Mathematics for Economics</td>
</tr>
</tbody>
</table>

### Semester III

<table>
<thead>
<tr>
<th>Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC- 301</td>
</tr>
<tr>
<td>EC- 302</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non- Core -I</th>
<th>Non-Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC- 303</td>
<td>Research Methodology for Economics</td>
</tr>
<tr>
<td>EC- 304</td>
<td>Methods of Econometrics</td>
</tr>
<tr>
<td>Non-Core-II</td>
<td>EC- 406</td>
</tr>
</tbody>
</table>

| EC- 305      | Banking and financial Institutions –I |
| EC- 306      | Institutional Economics |
| EC- 307      | Economics of Discrimination |
| EC- 308      | National Income Accounting |
Semester -I Core course

EC-101 Micro Economics - I

Topic I Introduction

1. Introduction to Microeconomics
2. Market and Price Mechanism
3. Disturbances to equilibrium, floor price, ceiling price.

Topic II Consumer Theory

1. The concept of and Measurement of Utility: Cardinal and Ordinal.
5. Concept and Measurement of Consumers’ Surplus.

Topic III Production Theory

2. Law of Variable Proportions Returns to the Variable Factor Returns to Scale.
3. Producer’s Equilibrium with One Input and Two Inputs.
6. Concept and Measurement of Producers’ Surplus.

Topic IV The Theory of Public Choice

1. Pareto Optimality
3. Compensation Criteria.
4. Arrow’s Social Welfare Function and Impossibility Theorem.

Recommended Books:


Semester -I Core Course
EC-102 Public Finance-I

Topic I Introduction
1. Role of government in organized society: changing perspective
2. Government in a mixed economy, public and private sector, government as an agent for economic planning and development Stabilization policy
3. Private goods, public goods and merit goods.

Topic II Rationale for Public Policy
1. Allocation of resource provision of public goods
2. Voluntary exchange models – Impossibility of decentralized provision of public goods - contributions of Samuelson and Musgrave
3. Demand revealing schemes for public goods, contributions of Clark, Groves and Leyard, Tiebout model
4. Theory of club goods

Topic III Public Expenditure
1. Wagner’s law of increasing state activities
2. Wiseman-Peacock hypothesis, Pure theory of public expenditure
4. Gender budgeting

Topic IV Taxation
1. Theory of incidence Alternative concepts of incidence –
2. Allocative and equity aspects of individual taxes, Benefit and ability to pay approaches

Topic V Public Debt
1. Burden of public debt
2. Sources of public debt
3. Public borrowings and price level, Crowding out of private investment and activity

**Recommended Books**

2. Stiglitz Joseph – Economics of the Public Sector (different editions)
3. Herber – Modern Public Finance (different editions)
Semester- I Core Course

EC-103 International Economics -I

Topic I Overview of classical and modern trade theories
1. Classical theories of trade – Ricardo and the concept of Comparative Cost theory - opportunity cost
2. Heckscher Ohlin theorem, Verification of physical criterion and price criterion, Leontief paradox
3. Factor price equalization and explanation with Edgeworth Box diagram

Topic II New trade theories
1. New theories of trade, product life cycle and technology gap models
2. Preference similarity and intra-industry trade, economies of scale and monopolistic competition – Krugman
3. Theory of economic geography – Krugman, Neo-Heckscher Ohlin theorem

Topic III Terms of Trade
1. Gains from trade – offer curve
2. Growth and Terms of Trade
3. Different concepts of Terms of Trade and factors affecting Terms of Trade

Topic IV Trade Policy
1. Free trade vs. controlled trade
2. Tariffs and non-tariff barriers on trade, Effects of tariffs under partial equilibrium. (Price effect, terms of trade effect, competitive effect, income effect, revenue effect)
3. Effects under general equilibrium, Stolper – Samuelson theorem

Topic V Regional Integration
1. Customs Unions: Features of customs union theory.
2. Trade creation and trade diversion under customs union (with graphical treatment)
3. The creation of European Union

Topic VI GATT and WTO
2. WTO, Important Agreements under WTO,
3. Major developments since 1995,
4. Expected effects on the Indian economy.

**Recommended Books**

6. GATT, the Dunkel Draft and India J. M. Economic and Political Weekly, Vol. 27, No. 4 (Jan. 25, 1992), pp. 140-142
Semester- I Non- Core Course

EC- 104 Basic Statistics

Topic I Basic Math

1. Ratios
2. Writing a ratio in its simplest form, average rate
3. Direct and Inverse proportion, Problems involving ratio, rate and proportion
4. Expressing one quantity as a percentage of another, comparing two quantities by percentage greater than 100 %, Increasing/Decreasing a quantity by a given percentage, reverse percentages, problems involving percentages

Topic II Graphs and Diagrams

1. Graphs and Interpretation of graphs
2. Types of graphs: Bar Diagram, Flow charts, Pie charts, Pictograph, line Graphs, time series graphs, Stem and leaf Plot, Histogram, Dot Plot, Scatter plot
3. Types of Functions, and functions and graphs

Topic III Set Theory

1. Set language and Notations

Topic IV Basic Statistics

1. Measures of Central Tendency
2. Dispersion and Standard deviation
3. Skewness and Kurtosis

Topic V Sampling and Sampling Techniques

1. Principles of Sampling and factors affecting the inferences drawn from a sample
2. Concept of population, Sample, Sampling Frame and Sampling unit
3. Characteristics of representative sample
4. Sampling error
5. Types of Probability sampling techniques
6. Types of Non-probability sampling techniques

Recommended Books

2. Mathematics and statistics for Economics- G.S. Monga
3. Statistical Methods - S.P. Gupta
5. Statistics- Schaum’s outlines , Murray R. Spiegel; Larry J Stephen
Semester- I Non- Core Course
EC-105 Mathematical techniques for Economics

Topic I Basic Application in Economics
1. Review and Basic Applications in Economics

Topic II Exponential and Logarithmic Functions
1. Single Variable Calculus
2. Marginal Concepts b Elasticity
3. Optimization Techniques in Consumer and Production Theory
4. Consumer and Producer Surplus

Topic III Multivariate Calculus
1. Economic Functions
2. Unconstraint Optimization
3. Constraint Optimization
4. Special Matrices (Jacobian and Hessian)
5. Comparative Statics and Concave Programming

Topic IV
1. First Order Differential Equation
2. First Order Difference Equations
3. Second Order Differential Equations

Topic V Growth Models

Recommended Readings
1. Introduction to Mathematical Economics - Edward Dowling
2. Mathematics for Economists - Simon and Blume
3. Fundamental Methods of Mathematical Economics - Chiang
Semester- II Core course  
EC-201 Micro Economics- II

Topic I Classification of Markets
1. Classification of Markets.
2. Various types of Markets.

Topic II Monopoly
1. Measurement of Monopoly power.
2. Equilibrium of a Firm under Monopoly.
3. Price Discrimination under Monopoly, different types.
4. Comparison of monopoly and perfectly competitive market outcomes.
5. Regulation of Monopoly Power.

Topic III Imperfect Competition
1. Monopolistic Competition, Price and Non-price competition, Equilibrium.
2. Product Differentiation, Selling Costs and Excess Capacity.
3. Oligopoly, Basic market structure, Non-collusive oligopoly.
5. Goal of Profit Maximization in Oligopoly.

Topic IV Imperfect Markets
1. Asymmetric Information: Markets for Lemons
2. Moral Hazard
3. Adverse Selection: Incomplete Information
4. Signalling

Recommended Books
Topic I Fiscal Policy

1. Objectives of fiscal policy: Full employment, Inflation Targeting, Economic growth, Redistribution of income and wealth
2. Fiscal policy for stabilization: Automatic vs. discretionary stabilization, Alternative measures of resource mobilization and their impact on growth, Distribution and prices Balanced budget multiplier
3. Interdependence of fiscal and monetary policies, budgetary deficits and their implications

Topic II Indian Tax system

1. Tax Revenue and Non-tax revenue of the Union, State and local bodies
2. Analysis of central and state government budgets – Fiscal situation of the PRIs, Current Budget Analysis
3. Major taxes in India: Direct and indirect taxes,
4. Major issues in Indian Taxation: Taxation of agriculture, Expenditure tax, Taxes on Services, Issue of Subsidies
5. Reform in direct and indirect taxes
6. Goods and Services Tax (GST)
7. Trends in public expenditure and public debt

Topic III Fiscal Federalism

1. Fiscal federalism in India: Vertical and horizontal imbalance
2. Assignment of function and sources of revenue: Constitutional provisions, Finance commission and planning commission, NITI Ayog
3. Devolution of resources and grants: Theory of grants, Resource transfer from union to state, Criteria for transfer of resources
4. Center-state financial relations in India: Problems if states’ resources and indebtedness

Topic IV Issues in India’s Fiscal system

1. Reports of Finance Commissions (FC) in India: Recommendations of the latest FC - Fiscal crisis and fiscal sector reforms in India
Recommended Books

1. Ulbrich – Public Finance in Theory and Practice
2. Bagchi A. – Readings in Public Finance
3. Various Budget Documents in India
4. Economic Surveys of India
Semester-II Core course

EC-203 International Economics -II

Topic I Balance of payments

1. Equilibrium and Disequilibrium in BOP, adjustment mechanisms.
4. Foreign Trade Multiplier, National Income and BOP

Topic II Exchange rates and International Finance

1. Exchange rates. Flexible and fixed exchange rates.
3. Spot rates and forward contracts, options and futures.

Topic III Exchange control

1. Convertibility on current account and capital account
2. Exchange control: objectives of exchange control. Methods of exchange control,
3. Indian Rupee and its fluctuations in the international currency markets.

Topic IV Optimum Currency Area

1. Optimum currency area theories - Factor mobility theory, propensity to inflation theory
2. The process of development of Euro as an optimum currency area

Topic V FDI and Multinational Corporations

1. International financial movements and types of risk involved. Portfolio and direct investments and their impact on the economy.
2. Multinational and transnational corporations and their role in the international financial movements.

Topic VI International Financial System and Financial Crises

1. Rise and fall of Bretton Wood and the emerging International Monetary system,
2. IMF, mechanism of membership quota and borrowing, Conditionality. Role of SDRs
3. Important International Financial Crisis and the role of IMF (Oil crisis, International debt crisis, South East Asian crisis, Brazil Argentina and Mexico, Russia and Eastern Europe, The sub-prime crisis)

**Recommended readings**

4. Maurice Levi: International Finance
6. Mukherjee Smriti, Capital Account Liberalization & Flexible Exchange Rate
Semester- II Non- Core course
EC-204 Economics of Agriculture

Topic I Introduction
1. Fundamental differences between agricultural economics and economics of other businesses
2. Agrarian Questions and Differing forms of Capitalist Agrarian Transition
3. Mode of Agricultural Sectors
4. Classification of Farmers
5. Structure of Backward Agriculture- Causes of low investment and low productivity
6. Risk and Uncertainty in production- Inputs related risk and risk aversion, Adoption of Modern Technology under production uncertainty

Topic II Demand and Supply of agricultural products
1. Production function analysis in agricultural production behavior
2. Economics of supply of agricultural products
3. Theories of Marketable and Marketed Surplus
4. Theory of Demand for agricultural products
5. Price and Income elasticities of Demand for agricultural products
6. Factors affecting demand for agricultural products

Topic III Price determination in agriculture
1. Free market mechanism analysis
2. Fluctuation in agricultural prices
3. Wholesale and retail markets
4. Price spread
5. Role of hedging and speculation
6. Forward markets in agricultural commodities.

Topic IV Major aspects of Indian Agriculture
1. Institutional aspects of agricultural development in India
2. Growth and fluctuations in Indian Agriculture
3. Farm size, productivity and efficiency in Indian Agriculture
4. Price and Terms of Trade
5. Risk and Uncertainty
**Topic V Agricultural Policy**

1. Agricultural Price Polity in India - Minimum Support Price
2. Food Security– Food Corporation of India and Public Distribution System
3. Indian Agriculture in context of WTO regime

**Recommended Books**

1) Drummond E. V. and Goodwin J. W. – Agricultural Economics
2) Pensin J, Capps O and Rosson – Introduction to Agricultural Economics
3) Sadhu and Singh - Agricultural Economics
4) Reddy R and Sastry D – Agricultural Economics
5) Lakhi and Singh – Agricultural Economics
19) Rudra, Ashok (1984): Indian Agriculture: Myths and Realities
20) Joshi, P C (1987): Institutional Aspects of Agricultural Development
Semester- II Non- Core course
EC-205 Statistical Techniques

Topic I Introduction to statistics
1. Overview of Basic statistical concepts,
2. Central tendency and dispersion, Skewness and Kurtosis

Topic II Correlation and regression
1. Correlation coefficient, Standard error and regression equations,
2. One variable regression analysis

Topic III Fundamentals of Probability
1. Random Variable, and Mathematical Expectation,
2. Theoretical Distributions (Binomial, Normal, and Poisson)

Topic IV Sampling Techniques
1. Fundamentals of Sampling, Estimation, Statistical Inference,
2. Chi-Square Test, F-Distribution, ANOVA, Association of Attributes, Non-Parametric Tests

Topic V Index Numbers and Time Series
1. Introduction to index numbers, construction of indices.
2. Different forms of indices Introduction to time series

Recommended Books:
1. Comprehensive Statistical Methods - Arora, P.N.; Arora, Sumeet; Arora,
2. Statistical Methods – S. P. Gupta
Topic I National Income

Topic II Aggregate Supply Aggregate Demand
1. Difference between Potential Output and Actual Output, Classical Approach, Keynesian approach
2. Determination of Equilibrium, of Aggregate Demand and Supply, Determination of output and employment Effects of change in Aggregate Demand and Supply Curves, Classical Approach, Keynesian approach-neutrality of money

Topic III Brief structure of IS-LM Model
1. Derivation of IS curve and LM curve, Equilibrium in the Goods and Assets under fixed and flexible prices, Derivation of aggregate demand schedule

Topic IV Consumption Saving, Investment Spending
1. Consumption and saving
2. Theories of consumption: Life cycle hypothesis, Permanent income hypothesis.
3. Investment spending, Marginal productivity of capital, Concept of accelerator and super multiplier.

Topic V New Keynesian and New classical Approaches:
1. The Real Business cycle Theory, The Rational expectations Revolution
2. New Classical Macroeconomics: Perfect Information, Rational Expectations, Lucas critique- Imperfect information and asymmetric information, Real business cycle theory
**Topic VI Open Economy Issues**
1. Open Economy IS-LM-BP: The Mundell - Fleming Model, Macroeconomic policy
   Stabilization and exchange rate regimes

**Topic VII India’s Macro economy**
2. Problems and policy

**Recommended Books**
1. Rudiger Dornbush and Stanley Fisher - Macroeconomics (latest edition)
3. Branson - Macroeconomics Analysis
Semantic- III Core course
EC-302 Economics of Growth and Development -I

Topic I Development and Underdevelopment: An Overview
1. The relevance of economic development. Problems in defining economic development
2. Economic growth in historical perspective: Marx, Schumpeter, Gerschenkron
3. Characteristics of LDCs - structural view of underdevelopment
5. Per capita income as an index of development. Difficulties of measurement and comparability problems involved in the calculation of per capita according to exchange rate and purchasing power parity
6. Alternative measures of development gap - HDI

Topic II Poverty and Inequality
1. Poverty and income distribution. Defining poverty and problems of measurement.
2. Income inequality, measurements of inequality.
3. Understanding inequality in the developed and underdeveloped worlds. Impact of inequality on the process of development.

Topic III Theories of Economic Growth and Development
1. The Harrod-Domar growth model and its application to LDCs
2. Solow’s model of economic growth - The production function approach to the study of causes of growth
3. The Cobb- Douglas Production function - Embodied and disembodied technical progress
4. Surplus labour (Lewis), big push (Rosenstein-Rodan) , Balanced growth (Nurkse) , Unbalanced growth (Hirshman) - The process of cumulative causation (Myrdal), the center and periphery hypothesis - the dependency school
5. New Endogenous growth models- Intellectual capital: role of learning, education and research; AK model — Explanations of cross country differentials in economic growth

Topic IV Population growth and economic development
1. Population - basic concepts –
2. the theory of demographic transition - age structures of population
3. Migration - Rural and Urban migrations -The Harris - Todaro Model - problems of urbanization
4. Employment markets - Formal and informal employments - wage rates
Recommended Books

3. Thirlwall A P.- Growth and Development (6th or 7th edition)
Semester-III Non-Core Courses -I
EC-303 Research Methodology for Economics

Topic I Meaning of Research

1. Meaning of research in Economics.
2. Types of research (descriptive vs. analytical, fundamental vs. applied, qualitative vs. quantitative, conceptual vs. empirical, empirical vs. simulation based, conclusion oriented vs. decision-oriented, historical vs. a-historical.)
3. Importance and utility of Social Science research, Limitations of and difficulties in Social Science research.

Topic II Research Design

1. Stages involved in designing research -Conceptualizing the research topic.
2. Identifying and formulating the objectives.
3. Understanding the role played by methodology.

Topic III Research Methods and Techniques

1. Research methods and techniques- differences among them, the logical framework of investigation, the nature of problem and appropriate methodology.
2. Macro-level vs. Micro level research.
3. Data Collection, Sources of Data,
4. Primary Data, Surveys, Interviews, Questionnaires, personal interviews, group interviews, small group studies, Schedule, Observation, participant or nonparticipant observation.
5. Secondary data - Collection of Secondary data
6. Case studies.

Topic IV Analysis of Data

1. Examination of the collected data - (primary or secondary)
2. Classification and Tabulation, Bi-variate presentation.
3. Graphs and Diagrams
4. Measures of Central Tendencies. Dispersion, Correlation
5. Hypothesis Testing - Definition and Formulation
**Topic V Research Report Writing**

1. Stages of report writing - survey of literature, development of working hypotheses, preparation of research design, collection of information, processing of collected information, hypothesis testing, interpretation and generalization,
2. Report writing, references and bibliography.
3. Presentation - Power Point

**Recommended Books**

Semester- III Non- Core Course I
EC- 304 Methods of Econometrics

**Topic I The nature of regression analysis**

1. Two variable Regression model: Concept of PRF, Meaning of Linear Stochastic specification of PRF

2. Significance of the Stochastic Disturbance Term

**Topic II Two variable regressions**

1. Estimation through OLS-Assumptions, Estimators and their Properties, Gauss-Markov Theorem, coefficient of determination,

2. Two Variable Regression: Interval Estimation and hypothesis Testing-Normality Assumption and Properties of OLS Estimators under Normality Assumption,

3. Confidence Interval and Test of Significance Approach for Regression Coefficients, Analysis of Variance, Extensions of Two Variable Linear Regression Model - Regression through the Origin, Functional Forms

**Topic III Multiple Regression Analysis**

1. Problem of Estimation, Meaning of Partial Regression Coefficients, Adjusted R Square, Partial Correlation Coefficients, Problem of Inference,

2. Hypothesis testing, Uses of F test, Relaxing the Assumption of the OLS Multicollinearity and Consequences, Detection through Graphical Method, Spearman's rank Correlation Method, Goldfeld-Quandt Test, White’s test-remedial measures, Autocorrelation.

3. Nature of the Problem, BLUE Estimator in the Presence of Autocorrelation, Consequences, Detection of the Problem through Graphical Method and Durbin-Watson d test, Remedial Measures
**Topic IV Regression on Dummy Variables**

1. Nature of Dummy Variables, Regression on Quantitative and Qualitative Variables,

2. Testing for Structural Stability, Interaction Effects, Use of Dummy variables in Seasonal Analysis,

3. Use of dummy variables in combining Time series and Cross Sectional Data

**Topic V Simultaneous Equation Models**

1. Examples, Simultaneous Equation bias, Problem of Identification Definition and Rules for Identification

2. Estimation of Simultaneous Equation models Recursive Models, Indirect Least Squares Two stage Least Squares

**Topic VI Introduction to Time Series**

1. Autoregressive and Distributed Lag Models, Stationary and Non-Stationary Process,

2. Concept of Unit Root Process and Testing, Transforming Non-Stationary Time Series,

3. Introduction to Forecasting using Time Series, Vector Autoregressive Model

**Recommended Books**

1. Basic Econometrics - Damodar Gujarati
2. Introductory Econometrics A Modern Approach - Jeffrey Wooldridge
3. Theory of Econometrics - A Koutsoyinnis
4. Introduction to Econometrics - G. S Maddala
5. Econometric Methods - G S Maddala
Semester- III Non- Core Course II
EC- 305 Banking and Financial Institutions – I

Topic I Introduction

Topic II Banking system in India

Topic III Commercial Banking
1. Public Sector Banks- Nationalization of Banks – progress and problems post-nationalization,
3. Regional Rural Banks- Progress & Problems, Role of RRBs in Post reform period (1991)

Topic IV Banking sector Reforms after 1991

Topic V Non - Banking Financial Institutions
1. Definition of NBFC – RBI Classification of NBFCs. Non- banking Institutions-small savings, Pension Funds, Mutual Funds, Insurance Companies-Meaning & Features,
2. Regulations of NBFCs in India, Performance of NBFCs in India (since 1985) – Number, Size, volume and structure of deposits.

Recommended Books
5. Tannan M L (2010) “Banking Law and Practice in India” Lexis – Nexis India

Reports

1. Report on Trend & Progress of Banking - RBI Annual Reports
4. Report of the Committee on Financial Sector Reforms (Raghuram Rajan Committee)
Semester -III Non- Core Course II
EC- 306 Institutional Economics

Topic I Institutions
1. What are Institutions?
2. Social, Political, Cultural and Economic Institutions
3. What do the Institutions do?

Topic II What is Institutional Economics?
1. What does it try to do? The need for Institutional economics
2. Old Institutionalism and New Institutionalism, Challenges posed to Neo-Classical economics
3. Transactions Costs and Imperfect Information
4. Economies of Scale and Division of Labour

Topic III Institutions as a Fundamental Cause of Long Run Growth vs. High Growth leading to better Institutions- Empirical evidence.

Topic IV Interface between Institutional economics and Development economics
1. Institutions as a constraint for developing economies

Topic V How do institutions develop/change?
1. How and why do ‘good’ institutions not develop?
2. Which institutions matter?
3. How to get ‘good’ institutions? What should be the institutional agenda for developing economies? Debate between the two schools of thought
4. What are the ‘right’ institutions for a developing economy? Bardhan’s perspective on persistence of socially suboptimal institutions
5. Why poor nations remain poor?

Topic V Violence and Social Orders
1. Open Access Order and Limited Access Order

Recommended Books
Semester- III Non- Core Course II

EC- 307 Economics of Discrimination

Topic I Introduction, History and Economic Modeling

1. Introduction to Economics of Discrimination
2. Historical perspective on Discrimination
3. Causes and forms of Economic Discrimination
4. Economic models of Discrimination- Competitive and collective models, Overcrowding model, The Human capital Model

Topic II Inequality, Social Exclusion and Theories of Discrimination

1. Concept of Inequality- Group-based Inequality and Inter-personal Inequality
2. Social Exclusion: Concepts and types
3. Theories on Discrimination:
   i. Gary Becker (Test for Discrimination)
   ii. Kenneth Arrow (Belief Theory of Discrimination)
   iii. George Akerlof (Identity theory of Discrimination)
   iv. Herbert Blumer’s theory of discrimination

Topic III Market based Discrimination

1. Market discrimination- Discrimination in Factor Market
2. Input Market- Land Market, Labour Market, Gender, Occupation, and Agricultural Inputs
3. Discrimination in Commodity market-Discrimination in imperfect market
4. Econometrics models of labour market discrimination

Topic IV Public Policies to overcome Economic Discrimination and Experiences

1. Empowerment Policies,
2. Reservation policy or Affirmative Action Policies,
3. Land Policies, and
4. Experiences of USA, India, and South Africa

Recommended Books and Articles

10. Cowell, Frank A (2016). How much inequality we can explain A Methodology and an application to the Topiced States, Economic Journal Vol 105,
Workers, Russell Sage, New York.
41. Scoville, James (1996), Labour Market underpinnings of a caste economy, The


57. Thurow, Lester (1969), Poverty and Discrimination, Browking Institution, Washington, Chapter VII.


Semester- III Non- Core Course II
EC- 308 National Income Accounting

Topic I Concept of National Product

1. Concept of Production. Production exchanged in the market, Self Consumed Produce, Services of Housewives, Owner Occupied Dwellings, and Consumer durables.
3. Distinction between Value added from a particular sector and the final product available from the sector.
4. Gross and Net Production: Netting for depreciation
5. Domestic Product and National Product at Market Prices and Factor costs

Topic II Treatment of Special Sectors

1. Valuing the Product of / Treatment of Government sector
2. Valuing the Product of /Treatment Financial Intermediaries
4. Accounts for the producing sector, Consuming Sector, the government sector and the Rest of World.

Topic III Methods of Income Estimation

1. The Product Method
2. The Income Method
3. The Expenditure Method
4. The Equivalence of the three methods.

Topic IV Accounts for Different Sectors

1. Accounts for the producing sector
2. Accounts for the Consuming Sector
3. Accounts for the government sector
4. Accounts for the Rest of World
Topic V Related Topics

3. Green GDP

Recommended Book

Semester- IV Core course  
EC - 401 Macro Economics- II

Topic I Money and Liquidity

1. Definitions of Money, Money-ness and liquidity, Nature, functions, types and evaluation of money- The debate relating to the definition of money, endogenous and exogenous supply of money.
3. Alternative money stock measures, The quantity and components of money stock in India and broad trend in them

Topic II Demand for Money

1. Nominal v/s Real Cash Balance.
2. Neo Classical theory
3. Keynes’s Theory

Topic III Money and Prices

2. QTM as the theory of Price level
3. Baumol , Tobin theory

Topic IV Money Supply

1. Goals Targets, Indicators and instruments of Monetary Policy
2. Theory of Money Supply: high Powered Money, Money Multiplier Process, Determinants of Money Multiplier,
3. High Powered Money: Factors Affecting High Powered Money, Autonomy of High powered money

Topic V Inflation

1. Definition and sources of Inflation
2. Demand Pull Inflation, Cost Push Inflation, Income Shares Inflation
3. Phillips Curve
**Topic VI Theories of Interest Rates**

1. Real and monetary theories of the interest rate, Loanable funds theory, Keynesian theory
2. Wicksellian theory, Fisher's theory, Hicksian theory,
3. Interest rate differentials: Term-structure of interest rates, Role of interest rates in Macro economy, Credit market imperfections

**Topic VII Monetary Policy and Macro economy**

1. Monetary transmission mechanism and targeting Inflation
2. Money growth and interest rates Interest rate rules, Taylor rule: Rules versus discretion
3. Central Bank autonomy, Dynamic inconsistency of monetary policy credibility and reputation

**Recommended Books**

2. Bain, Keith & Howells, Peter (2009), Monetary Economics: Policy and Its Theoretical Basis, Palgrave
3. Wrightman D:- An Introduction to Monetary Theory and Policy
4. Gupta S. B. :- Monetary Economics Institutions, theory and policy
5. Gupta S B :- Monetary Planning for India
6. Harris:- Monetary Theory
7. RBI’s Monetary Policy Documents
Semester- IV Core Course  
EC-402 Economics of Growth and Development -II

**Topic I The role of agriculture and Industry in development**
1. Role of Agriculture in development - The supply response of Agriculture
2. The concept of ‘Marketed surplus’ - Size holdings and output.
3. Limitations of price policy and alternatives. Disguised unemployment
4. Role of industry. Major reasons for industrialization in LDCs. The infant industry argument. The employment argument. Export promotion vs import substitution. Capital-Intensive technology and employment in industry
5. The Role of Infrastructure - social and physical infrastructure - education and health infrastructure

**Topic II Mobilization of resources and the role of the government**
2. Non-inflationary finance of investment. Inflation and credit. Inflation and growth
3. The role of the government and markets in the developmental process - Development of distributive institutions. Poverty alleviation measures, public distribution systems.
4. Public policies like NREGA in India. Microfinance - issues related to microfinance. Self Help Groups and savings and Gender

**Topic III Trade and development**
1. Trade as an engine of growth - Dual gap analysis - Prebisch, Singer and Myrdal views.
2. Gains from trade and LDCs, foreign borrowing. Savings - Investment gap.
3. The foreign exchange gap. Models of capital imports and growth - Capital imports, domestic savings the ICOR - foreign borrowing and debt - servicing problem - types and measurement of international capital flows - the role of IMF and World Bank - Case studies of countries with trade as a growth engine

**Topic IV Sustainable Development**
1. Basic concept, strategies and measurements
2. Instruments for sustainable development
3. Climate change
4. Biodiversity
Topic IV Economic Performance/ progress of developing countries over the recent past

1. East Asian Miracle- East Asian Crisis
2. Latin American Economic Development
3. China’s Economic Development and Reforms
4. Africa’s Economic Development

Recommended Books

1. Meier G.M leading Issues in Development Economics
2. Thirval A P - Development Economics
3. Ray Debraj Development Economics
Semester- IV Core Course
EC - 403 Research Project

The following are the guidelines for the students.

1. The students are expected to identify the area of research and choose the topic of research project.
2. The students are expected to formulate the objectives of research and identify the appropriate research methodology.
3. Students can do research based on primary data or secondary data.
4. The students are expected to engage in literature review and place the research in the context of existing research body of work.
5. Students can do survey work if the research topic requires it.
6. The students will be expected to analyze the data etc.
7. The students are expected to write a research project. This will consist of preparing an abstract, learning the skills of organizing the text, writing of introduction, objectives of research project, main body of the text, conclusions and suggestions; providing references etc.

Students will have to work on their chosen topic and submit a dissertation of minimum 6,000 words & maximum 8,000 words in two copies to the Department.
Semester- IV Non -Core course
EC-404 Banking and Financial Institutions – II

Topic I Introduction to Financial Markets

1. Structure of Financial Markets

Topic II Money Markets

1. Money Market - Features & Constituents of the Money Market-Call Money Market, Treasury Bill Market, Reforms in the Indian Money Market; Certificate of Deposit (CDs); Commercial Paper (CPs), Repo market; Money Market Mutual Funds, Role of Discount and Finance House of India (DFHI)

Topic III Capital Market

1. Features & Constituents of Capital Market-Government, Corporate Sector, Financial Institutions, Commercial Banks & Others; Government Securities Market (Gilt Edged Market) and Industrial Securities Market; Equity Market, Debt Market & Derivatives Market; Reforms in the Indian Capital Market; Role of Securities and Exchange Board of India (SEBI)

Topic IV Foreign Exchange Markets

1. Foreign Exchange Rates; Risks in a foreign exchange market; Factors affecting foreign exchange rates, Equilibrium in Foreign Exchange Market; Intervention in Foreign Exchange Markets

Topic V Financial Regulation

1. RBI - Banking Regulation and Supervision- Bank Capital, International Banking Regulation, Banking Crisis and Central Bank Independence,
2. IRDA- Objectives & Role, Insurance Sector Reforms in India,
3. PFRDA - Objectives & Role, Pension Reforms in India
Recommended Books

Semester- IV Non- Core course  
EC- 405 Economics of Finance

**Topic I Introduction**
1. Role of finance in economic development.
3. Financial sector participants - firms, individuals, Government.
4. General characteristics of securities classification between fixed income and random cash flow - government bonds, index-linked bonds, corporate Securities.

**Topic II Time value of money**
1. Future value of an asset, Present value of an asset.
2. Future and present values of multiple cash flows.
3. Level cash flows - perpetuities and annuities.
4. Inflation and interest rates, Real v/s nominal cash flows, Valuing real cash payments, Effective annual interest rates

**Topic III Financial Planning**
1. Requirements of effective planning, Capital budgeting and capital structures of a firm
2. Regulations governing supply of securities.
3. Placing debt and equity in a firm's finance, measurement of debt vs. equity.
4. Components of a financial planning model, Percentage of sales model.
5. Pitfalls in financial planning, Investment criteria- Net Present Value (NPV), internal rate of return - concept and applications in project appraisal, investment criteria when projects interact, Mutually Exclusive Projects and the IRR Rule

**Topic IV Financial statement analysis**
1. Balance sheets, income statements, cash flow statements.
3. Using financial ratios for measuring company’s performance

**Topic V Stock markets**
1. Primary markets- IPOs, role of underwriters,
2. Secondary markets and dematerialization.
4. Estimating Expected Rates of Return, The Price-Earnings Ratio, Bond valuation-characteristics of bonds, bond prices and yields, variation in bond prices due to interest rate changes, yield to maturity v/s current yield the yield curve, nominal and real interest rates valuation of corporate bonds.

5. Functions and powers of SEBI

**Topic VI Risk, Return, and Capital Budgeting**
1. Measuring Market Risk, the CAPM, Risk and Return, Using the CAPM to Estimate Expected Returns.
2. Capital Budgeting and Project Risk, Determinants of Project Risk, Arbitrage pricing theory, Introduction to risk, return and opportunity cost of capital, Market indexes, Measuring Risk variance and Standard Deviation
3. Measuring the Variation in Stock Returns Risk and Diversification Asset versus Portfolio Risk

**Topic VII Derivatives markets**
1. Derivative-Meaning & types Futures market-Evolution & History Hedgers, Speculators, Arbitrageurs Financial futures and commodity futures forward contracts.

**Recommended Books**

6. The Efficient Markets Hypothesis ; Jonathan Clarke, Tomas Jandik, Gershon Mandelker
7. Uncertainty & Risk Analysis ; Chris Rodger and Jason Petch , Business Dynamics PricewaterhouseCoopers, MCS United Kingdom; April 1999
8. Equity derivatives in India- The state of the art; Susan Thomas and Ajay Shah
9. Introduction to Project Finance ; Edited by Andrew Fight; Butterworth-Heinemann
Semester- IV Non- Core Course
EC- 406 Environmental Economics

Topic I Introduction to the key concepts in Environmental Economics
1. Definition of Environmental Economics
2. Economy - Environment Interaction, Environment as a social asset
3. Markets and market failures, government regulation, Cost Benefit Analysis

Topic II Natural Resource Management
1. Entropy law and Material balance - resources and waste generation, Stock and Flow of exhaustible resources and Fund services of Eco-system resources, Problems of Resources Depletion and degeneration
2. Classification of resources: Renewable and Non-renewable. Biotic and Abiotic, Exhaustible and Non-exhaustible resources
3. Biotic Resources: Vegetation and forests; Agriculture, Fishery and livestock; Biodiversity: Exhaustion and Degradation
4. Abiotic Resources: Land and Soil, Surface Water and ground water; Energy resources; Non-Energy mineral resources; Problems of their depletion and exhaustion (Land and Soil use and erosion)
5. The Planet and Concept of eco-system, Major eco-systems of the world: Solar energy Flow,

Topic III Some Theoretical Contributions to Environmental Economics

2. Topic IV Environment Problems of India:
3. State of India’s Environment: Problems of Pollution due to Overuse of Ecosystem Services (With reference to sectoral activities of agriculture, mining, industry and other activities such as transport and Health services)
4. Air, Water and Soil Pollution:
5. Air Pollution: Types of pollutants and their impact, Ozone Depletion, Global Warming,
6. Water Pollution: The Concepts of Biological Oxygen Demand (BOD) and Chemical Oxygen Demand (COD), Ph values, Fluoride; Biotic Waste; Fertilizer use Arsenic pollution; Heavy metals and Toxic wastes; Sewage Land Degradation- the problem of Solid waste disposal and contamination; The problem of Salinity and water logging
7. Natural Resource Depletion, Deforestation, Industrial and Agricultural Pollution,

**Topic V Introduction to Sustainable Development**

1. Concept: Week vs. Strong Sustainability Criteria
2. Sustainable resource use
3. Carbon Footprints as threat to Sustainable Development.
4. Indian Environmental policy instruments: Functions of Ministry of Environment and Forest, Pollution Control Boards, Environmental Laws in India.
5. International Environmental policy: Major issues like climate change, carbon trading, international co-operation: Kyoto Protocol

**Recommended Readings:**

Semester- IV Non- Core Course
EC- 407 Gender Economics

Topic I Introduction
1. Nature and Significance of Gender Studies
3. System of gender inequality factors: the development factor, discrimination and behavioral factors. Gender order. Gender gap in access to resources and control over economic resources. Gender risk groups

Topic II Economic Growth and Gender Equality
1. Globalization of the world economy and gender status.
3. Women’s contribution to GDP. Life cycle and gender differences in incomes
4. Impact of gender equality on economic growth and socio-economic development.

Topic III The gender factor in household economics. Distribution of resources and decision-making mechanisms within the household
1. Household economics: theoretical concepts and gender critique
2. Gender critique of the neo-Marxist approach.
3. Gender critique of neo-classic household theory. The gender contract, negotiation models within families.

Topic IV Gender inequality in the labour market
1. Inequality in the labour market: entry into and exit from the labour market, careers, wages, skills training.
Topic V Gender policy: national and global level.

1. Role of UNO and World Bank in Gender equality
2. Indian policy considerations regarding gender equality
3. Gender Budgets

Recommended Books

1. Maithreyi Krishnaraj, Gender Population and Development
2. R.K.Sen and Anita Banaerji, Women and Economic Development
5. AR Morrison, D Raju, N Sinha (2007), Gender equality, poverty and economic growth, World Bank Publications