

**UNIVERSITY OF PUNE
DEPARTMENT OF ECONOMICS**

**REVISED SYLLABUS FOR M.A. ECONOMICS –
CREDIT SEMESTER COURSE AT THE
DEPARTMENT OF ECONOMICS, UNIVERSITY OF PUNE**

(Syllabi for Semester I and semester II to be started from July 2012)

The students will have *THREE* Core courses and will have to select *ONE* Non-Core course in each of the two semesters, in M.A. Part I. There will be a total of *Four* courses in each of the two semesters for M.A in Economics.

(Part I. Each course will have *FOUR* credits. Syllabi only for University Department of Economics)

M.A. Part I Semester I

Core Courses

EC-101 Micro Economic Analysis I
EC-102 Public Economics –I
EC-103 International Trade

Non- Core Courses

(Any one course to be selected from below)

EC -104 Fundamentals of Mathematics and Statistics
EC – 105 Mathematical Economics

DETAILED SYLLABUS :

SEMESTER I – Core course

EC-101 Micro-economic Analysis - I

Topic I: Introduction

- 1) The Basic Micro- Economic Problem of Scarcity and Choice.
- 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.
- 2) Theory of Consumer Choice: Marginal Utility Theory, Indifference curve approach, Income and Price expansion paths, Demand Curve. Income and Substitution Effects: Slutsky and Hicksian approach.
- 3) Theory of Revealed Preference, Index Numbers.
- 4) Concept of Elasticity: Price, Income and Cross Elasticities.

- 5) Concept of Consumers' Surplus.

Topic III: Production Theory

- 1) Production Function – One input, two inputs: Isoquants.
- 2) Law of Variable Proportions, Returns to the Variable Factor, Returns to Scale, Cobb- Douglas Production Function.
- 3) Producer's equilibrium with one and two inputs.
- 4) Cost Curves, Total, Average and marginal Cost Curves, Short Run and Long Run Costs, Economist concept of cost.
- 5) Derivation of Supply curve, Firm and Industry, Short Run and Long Run.
- 6) Concept of Producers' Surplus.

Topic IV: Equilibrium.

- 1) Short Run, Long Run Equilibrium of a Single Firm under Competitive conditions.
- 1) Partial and General Equilibrium.
- 2) Edgeworth Box Depiction of Competitive market equilibrium involving only exchange.

Recommended Books:

1. Varian, Hal (1996): Intermediate Microeconomics, W.W. Norton and Company, New York.
2. Hirschleifer J and A. Glazer (1997): Price Theory and Applications, Prentice Hall of India, New Delhi.
3. Stigler, G (1996): Theory of Price, Prentice Hall of India, New Delhi.
4. Sen, A.(1999): Micro Economics: Theory and Applications, Oxford University Press, New Delhi.
5. Misra S.K. and V.K. Puri (2001): Advanced Microeconomic Theory, Himalay Publishing House, New Delhi.
6. Kreps, David, M (1990): A Course in Microeconomic Theory, Princeton University Press.

SEMESTER I – Core course

EC-102 Public Economics - I

Topic 1 – Introduction

Role of government in organized society, changing perspective – Government in a mixed economy, public and private sector – government as an agent for economic planning and development – Private goods, public goods and merit goods.

Topic 2 – Rationale for Public Policy

Allocation of resource provision of public goods – Voluntary exchange models – Impossibility of decentralized provision of public goods - contributions of Samuelson and Musgrave – Demand revealing schemes for public goods, contributions of Clark, Groves and Leyard – Tiebout model – Theory of club goods – Stabilization policy.

Topic 3 – Public Expenditure

Wagner’s law of increasing state activities – Wiseman-Peacock hypothesis – Pure theory of public expenditure – Structure and growth of public expenditure – Criteria for public investment – Social cost-benefit analysis – Project evaluation – Estimation of costs – Discount rate – Reforms in expenditure budgeting – Programme budgeting and zero base budgeting.

Topic 4 – Taxation

Theory of incidence – Alternative concepts of incidence – Allocative and equity aspects of individual taxes – Benefit and ability to pay approaches – Theory of optimal taxation – Excess burden of taxes – Trade off between equity and efficiency.

Topic 5 – Public Debt

Burden of public debt – Sources of public debt – Public borrowings and price level – Crowding out of private investment and activity – Principles of debt management and repayment.

Recommended Books –

Musgrave R. A. and Musgrave P. S. – The theory of Public Finance (different editions)

Stiglitz Joseph – Economics of the Public Sector (different editions)

Herber – Modern Public Finance (different editions)

SEMESTER I – Core course

EC-103 International Trade

Topic 1 – Overview of classical and modern trade theories

Classical theories of trade – Ricardo and the concept of Comparative Cost theory - opportunity cost –Heckscher Ohlin theorem, Verification of physical criterion and price criterion, Leontief paradox – Factor price equalization and explanation with Edgeworth Box diagram

Topic 2 – New trade theories

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

Topic 3 – Terms of Trade

Concepts of Net Barter Terms of Trade, Gross Barter Terms of Trade, factors affecting Terms of Trade

Topic 4 – Trade Policy

Free trade vs. controlled trade, 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) Effects under general equilibrium, Stolper – Samuelson theorem

Topic 5 – Regional Integration

Customs Unions: Features of customs union theory. Trade creation and trade diversion under customs union (with graphical treatment), the creation of European Union

Topic 6 – GATT and WTO

International trade agreements. Dunkel proposal. WTO, Important Agreements under WTO, major developments since 1995, Expected effects on the Indian economy.

Recommended books

Paul R. Krugman & Maurice Obstfeld (2009) International Economics Theory and Policy. Pearson Education Publication New Delhi

Chacholiades, M. (1990), International Trade : Theory and Policy, McGraw Hill, Kogakusha, Japan.

Kindleberger, C.P. International Economics, R.D. Irwin, Homewood.

Salvatore, D. (1997), International Economics, Prentice Hall, Upper Saddle River, N.J., New York.

Soderston, Bo (2005), International Economics, The Macmillan Press Ltd., London.

SEMESTER I – Optional Course

EC-104 Fundamentals of Mathematics and Statistics

Topic - 1 Numbers and operations of numbers

Rational numbers and irrational numbers, real numbers, integers and fractions, squares, cubes, square roots and cube roots by prime factorization, negative numbers

Examples of very large and very small numbers such as million/billion/trillion, positive, negative, zero and fractional indices, laws of indices

Topic – 2 Ratio, rate and proportion

Ratios involving rational numbers, writing a ratio in its simplest form, average rate, direct and inverse proportion, problems involving ratio, rate and proportion

Topic – 3 Percentages

Expressing one quantity as a percentage of another, comparing two quantities by percentage, percentages greater than 100%, increasing/decreasing a quantity by a given percentage, reverse percentages, problems involving percentages

Topic - 4 Set Theory, Relations, and Functions of Single Variables

Set language and notation, Types of Functions, functions and graphs, Calculus of Single Variable Functions, Limits and Continuity, Derivatives of Single Variable Functions, (Optimization Techniques, Integration)

Topic 5 Matrix Algebra

Display of information in the form of a matrix of any order, interpreting the data in a given matrix product of a scalar quantity and matrix problems involving the calculation of the sum and product (where appropriate) of two matrices

Topic 6 Basic Concepts in Statistics

Data and data analysis, graphs and diagrams, frequency distributions, Measures of Central Tendency (Mean, median, Mode), Dispersion (Standard Deviation)

Recommended Books:

1. Introduction to Mathematical Economics – Edward Dowling
2. Mathematics for Economists - Simon and Blume
3. Fundamental Methods of Mathematical Economics – Alpha Chiang
4. Business Mathematics – Rajagopalan and Sattanathan

SEMESTER I – Optional course

EC-105 Mathematical Economics

Topic 1

Review and Basic Applications in Economics

Topic 2

Exponential and Logarithmic Functions

1. Single Variable Calculus
 - a. Marginal Concepts
 - b. Elasticity
 - c. Optimization Techniques in Consumer and Production Theory
 - d. Consumer and Producer Surplus

Topic 3

Multivariate Calculus

- a. Economic Functions
- b. Unconstraint Optimization

- c. Constraint Optimization
- d. Special Matrices (Jacobian and Hessian)
- e. Comparative Statics and Concave Programming

Topic 4

First Order Differential Equation and First Order Difference Equations

Second Order Differential Equations

Topic 5

Growth Models

Books:

- 5. Introduction to Mathematical Economics – Edward Dowling
- 6. Mathematics for Economists - Simon and Blume
- 7. Fundamental Methods of Mathematical Economics - Chiang

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SEMESTER II – Core course

EC-201 Micro-economic Analysis – II

Topic I: Classification of Markets

- 1) Classification of Markets. 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

- 6) Monopolistic Competition, Price and Non-price competition, Equilibrium.
- 7) Product Differentiation, Selling Costs and Excess Capacity.
- 8) Oligopoly, Basic market structure, Non-collusive oligopoly, Cournot-Bertrand Solution.
- 9) Collusive oligopoly, Cartels, Price and Output Determination
- 10) Game Theory, Basic Concepts, Dominant Strategy Equilibrium, Nash Equilibrium, Repeated and Sequential Games.

Topic IV: Alternative Theories of the Firm

- 1) Goal of Profit Maximization and Alternative Theories of the Firm.
- 2) Baumol's Sales Revenue Maximization Model.

Topic V: Theory of Distribution and Welfare Economics

- 1) Marginal Productivity Theory. Product Exhaustion theorem. (Euler's Theorem)
- 2) Pigou's Welfare Theorem
- 3) Pareto Optimality
- 4) Social Welfare Function, Compensation Criteria.
- 5) Arrow's Impossibility Theorem.

Recommended Books:

1. Varian, Hal (1996): Intermediate Microeconomics, W.W. Norton and Company, New York.
2. Hirschleifer J and A. Glazer (1997): Price Theory and Applications, Prentice Hall of India, New Delhi.
3. Stigler, G (1996): Theory of Price, Prentice Hall of India, New Delhi.
4. Sen, A.(1999): Micro Economics: Theory and Applications, Oxford University Press, New Delhi.
5. Misra S.K. and V.K. Puri (2001): Advanced Microeconomic Theory, Himalay Publishing House, New Delhi.
6. Kreps, David, M (1990): A Course in Microeconomic Theory, Princeton University Press.

SEMESTER II – Core course**EC-202 Public Economics – II****Topic 1 – Fiscal Policy**

Objectives of fiscal policy – Full employment – Anti-inflation – Economic growth – Redistribution of income and wealth – Interdependence of fiscal and monetary policies – budgetary deficits and its implications – Fiscal policy for stabilization – Automatic vs. discretionary stabilization – Alternative measures of resource mobilization and their impact on growth – Distribution and prices – Balanced budget multiplier.

Topic 2 – Fiscal Federalism

Fiscal federalism in India – Vertical and horizontal imbalance – Assignment of function and sources of revenue – Constitutional provisions – Finance commission and planning commission – Devolution of resources and grants – Theory of grants – Resource transfer from union to state – Criteria for transfer of resources – Center-state financial relations in India – Problems if states' resources and indebtedness – Transfer of resources from union and state to local bodies.

Topic 3 – Indian Tax system

Revenue of the Union – State and local bodies – Major taxes in India – Base of taxes – Direct and indirect taxes – Taxation of agriculture – Expenditure tax – Reform in direct and indirect taxes – Taxes on Services – Non-tax revenue of center, state and local bodies – Analysis of central and state government budgets – Fiscal situation of the PRIs - Trends in public expenditure and public debt

Topic 4- Issues in India's Fiscal system

Reports of Finance Commissions in India - Fiscal crisis and fiscal sector reforms in India's – India's response to Global economic shocks.

Recommended Books:

Ulbrich – Public Finance in Theory and Practice
Bagchi A. – Readings in Public Finance

SEMESTER II – Core course

EC-203 International Finance

Topic - 1 – Balance of payments

Balance of payments. Current account and capital account transactions. Disequilibrium in BOP, adjustment mechanisms. Marshall-Lerner elasticity approach, absorption approach, monetary approach, Internal and External Balance. Swan model.

Topic - 2 Exchange rates

Exchange rates. Flexible and fixed exchange rates. Determination of exchange rates. Revaluation and Devaluation, Appreciation and Depreciation, Risks and rewards involved. Spot rates and forward contracts, options and futures. International financial markets. Euro currency markets, International Bond Markets

Topic – 3 Exchange control

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

Topic – 4

Optimum currency area theories - Factor mobility theory, propensity to inflation theory - the process of development of Euro as an optimum currency area

Topic – 5

International financial movements. Portfolio and direct investments and their impact on the economy. Multinational and transnational corporations and their role in the international financial movements.

Topic – 6

Rise and fall of Bretton Wood and the emerging International Monetary system, IMF, mechanism of membership quota and borrowing, Conditionalities. Evaluating the contribution of IMF, 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)

Prescribed and recommended readings:

1. James Ingram: International Economics (Ed. 1995)
2. Krugman International Economics (latest edition)
3. Kennen International Economics (latest edition)
4. Maurice Levi: International Finance

SEMESTER II – Optional Course

EC-204 Agriculture Economics

Topic 1 – Introduction

Various agricultural activities – Fundamental differences between agricultural economics and economics of other businesses – The Cobweb phenomenon – Major types of organizations in agriculture – Concept of a farm firm – Farm management decisions – Limitations to optimal decision making in farm management.

Topic 2 – Demand and Supply of agricultural products

Factors affecting supply – Supply function and lag in supply of agricultural commodities – Cobweb phenomenon – The problem of supply response – Fluctuations in supply and its impact. Factors affecting demand – Demand function in agriculture – Elasticity of demand for farm products

Topic 3 – Price determination in agriculture

Free market mechanism analysis – Fluctuation agricultural prices – Wholesale and retail markets – Price spread – Role of hedging and speculation – Forward markets in agricultural commodities.

Topic 4 – Major aspects of Indian Agriculture

The problem of agricultural credit and rural indebtedness – Kisan credit cards – Marketing and distribution of agricultural produce – Technology in agriculture – Mechanization and Green Revolution – Irrigation extension services – Labour and wages in agriculture – Risk and produce irrigation – Labour and wages – Risk and uncertainty – Size of land and productivity

Topic 5 – Agricultural Policy

Subsidies – Minimum Support Price – Public Distribution System – Terms of trade in agriculture. Indian Agriculture in context of WTO regime .

Recommended Books –

Drummond E. V. and Goodwin J. W. – Agricultural Economics
Penson J, Capps O and Rosson – Introduction to Agricultural Economics
Sadhu and Singh - Agricultural Economics
Reddy R and Sastry D - Agricultural Economics
Lakhi and Singh – Agricultural Economics

SEMESTER II – Optional Course

EC-205 Statistics

Topic 1 Introduction to statistics

Overview of Basic statistical concepts, central tendency and dispersion, Skewness and Kurtosis

Topic 2 Correlation and regression

Correlation coefficient, Standard error and regression equations, one variable regression analysis

Topic 3 Fundamentals of Probability

Random Variable, and Mathematical Expectation, Theoretical Distributions (Binomial, Normal, and Poisson)

Topic 4: Sampling Techniques

Fundamentals of Sampling, Estimation, Statistical Inference, Chi-Square Test, F-Distribution, ANOVA, Association of Attributes, Non-Parametric Tests

Topic 5: Index Numbers and Time Series

Introduction to index numbers, construction of indices, different forms of indices

Introduction to time series

Books:

1. Comprehensive Statistical Methods - Arora, P.N.; Arora, Sumeet; Arora,
2. Statistical Methods – S. P. Gupta
3. Statistical Methods – S. C. Gupta