



Maharashtra Education Society's  
**Abasaheb Garware College**  
**(Autonomous)**

*(Affiliated to Savitribai Phule Pune University)*

**Two-Year Degree Program in MA Economics**  
**(Faculty of Humanities)**

**Syllabi under Autonomy**  
**M.A. I (Economics)**

**Choice Based Credit System Syllabus**  
**To be implemented from the Academic Year, 2022-23**

**Structure of the Course: M. A. I (Economics)****STRUCTURE****POST****GRADUATE****Eligibility: Graduate of any Discipline**

Year	Semester	Course Type	Paper Number	Course Code	Course Title	Remark	Credit	No. of Lectures
1	I	Theory	EC-C1	PAEC-111	Micro Economic Analysis-I	Compulsory	4	60
		Theory	EC-C2	PAEC-112	Public Economics-I	Compulsory	4	60
		Theory	EC-C3	PAEC-113	International Trade	Compulsory	4	60
		Theory	EC-O4	PAECEL E-114	Agricultural Economics	Elective	4	60
		Theory	EC-O4	PAECEL E-114	Statistical Techniques	Elective	4	60
	II	Theory	EC-C4	PAEC-121	Micro Economic Analysis-II	Compulsory	4	60
		Theory	EC-C5	PAEC-122	Public Economics-II	Compulsory	4	60
		Theory	EC-C6	PAEC-123	International Finance	Compulsory	4	60
		Theory	EC-O7	PAECEL E-124	Labour Economics	Elective	4	60
		Theory	EC-O7	PAECEL E-124	Mathematical Economics	Elective	4	60

Year	Semester	Course Type	Paper Number	Course Code	Course Title	Remark	Credit	No. of Lectures
2	III	Theory	EC-C7	PAEC-231	Macro Economic Analysis-I	Compulsory	4	60
		Theory	EC-C8	PAEC-232	Growth and Development -I	Compulsory	4	60
		Theory	EC-C9	PAEC-233	Research Methodology-I	Compulsory	4	60
		Theory	EC-O10	PAECE LE-234	Capital Market	Elective	4	60
		Theory	EC-O10	PAECE LE-234	Industrial Economics	Elective	4	60
	IV	Theory	EC-C10	PAEC-241	Macro Economic Analysis-II	Compulsory	4	60
		Theory	EC-C11	PAEC-242	Growth and Development -II	Compulsory	4	60
		Project	EC-C12	PAECP-243	Research Project	Compulsory	4	60
		Theory	EC-O13	PAECE LE-244	Econometrics	Elective	4	60
		Theory	EC-O13	PAECE LE-244	Foreign Exchange Market	Elective	4	60

### Micro Economic Analysis I: M. A. I (Economics)

#### Preamble

The course makes an attempt to provide an introduction to the advanced theories in Microeconomics and at the same time provide an understanding of the analytical rigour of the subject. Micro Economics is a core course that covers Consumer Choice, Concept of Revenue and Elasticity, Cost, Production Function, Concept of Surplus, Social Welfare. Microeconomics brings to the fore the practical significance of microeconomic theories.

#### Course Objectives:

1. To provide a thorough understanding of the basic economic problems of economics
2. To enable students to apply micro economic concepts in various contexts.
3. To enable understanding the basic theories in microeconomics such as demand theory, production theory, market structures.
4. To discuss the modern developments in micro economics such as Modern Demand theories.

**SEMESTER I**

**PAEC-111: Micro Economic Analysis I**

**Lectures- 60 (Credits 4)**

**Learning Outcomes:**

1. Ability to apply the concepts of micro economics such as demand, supply, revenue, cost, elasticity, etc.
2. Ability to analyze and demonstrate knowledge of the basic theories/laws in economics- law of demand, law of supply, production function, etc.
3. At the end of the course, the student should be able to evaluate microeconomic concepts, models and its use in real life situations

**1. The Basic Principles of Microeconomics. (10 Lectures)**

- 1.1 Principles of Economics – Decision Making, People’s Interaction, Economy as a Whole
- 1.2 Thought Process of an Economist – as a scientist and a policy adviser
- 1.3 The Market forces of supply and demand and its equilibrium

**2. Consumer Theory (18 Lectures)**

- 2.1 The Theory of Consumer Choice: Preference Ordering, Marginal Utility Theory, Indifference Curve Approach, Income and Price Expansion Paths, Income and Substitution Effects: Slutsky and Hicksian Approach
- 2.2 Derivation of Demand Curve using Consumer Equilibrium with the help of IC
- 2.3 Theory of Revealed Preference
- 2.4 Concept of Total Revenue, Average Revenue and Marginal Revenue- Mathematical Applications; Concept of Elasticity: Price, Income and Cross Elasticity- Mathematical Applications
- 2.5 The Concept of Consumers’ Surplus
- 2.6 Modern Demand Theory – Introduction to Choice under Uncertainty (Von Neumann-Morgenstern Expected Utility Theory); Pragmatic Approach to Demand Analysis

**3. Production Theory (18 Lectures)**

- 3.1 Production Function – One Input, Two Inputs: Isoquants
- 3.2 Law of Variable Proportions, Returns to the Variable Factor, Returns to Scale, Cobb- Douglas Production Function
- 3.3 Producer’s Equilibrium with one and two inputs
- 3.4 Cost Curves, Total, Average and Marginal Cost, Short Run and Long Run Costs, Concept of Economic Cost, Mathematical Applications

## M. A. I (Economics)

3.5 Derivation of Supply curve, Firm and Industry, Short and Long Run

3.6 Concept of Producers' Surplus

### 4. Introduction to Welfare Economics

(14 Lectures)

4.1 Concept of Social Welfare

4.2 Pigou's Contribution to Welfare Economics

4.3 Pareto Optimality; Product Exhaustion Theorem (Euler's Theorem)

4.4 Social Welfare Function, Compensation Criteria

4.5 Amartya Sen- Social Choice and Welfare, Entitlements

### Reference Books

#### Basic Reading List:

1. H. L. Ahuja (2019) Advanced Economic Theory Microeconomic Analysis – S. Chand Publication, New Delhi
2. Koutsoyiannis Modern Microeconomics, Palgrave Macmillan, London
3. D.N.Dwivedi (2011) Micro Economics – Pearson Publication, New Delhi.
4. Misra S.K. and V.K. Puri (2001): Advanced Microeconomic Theory, Himalaya Publishing House, New Delhi.
5. Mansfield, E. (1997), Micro Economics, W. W. Norton and Company, New York.
6. Mankiw, N.G. (2002), Principles of Economics, Thomson Asia Pvt. Ltd., Singapore.
7. Salvatore, D. (2003), Micro Economics, Oxford University Press.
8. Sen Amartya (2017) 'Collective Choice and Social Welfare' Penguin [Original Edition (1970)]
9. Kenneth Arrow, Amartya Sen and Kotaro Suzumura (2001) 'Handbook of Social Choice and Welfare' Edited
10. भावे, केळकर, मूल्य सिद्धांत, महाराष्ट्र ग्रंथ निर्मिती मंडळ, पुणे
11. चव्हाण, प्रगत सूक्ष्म लक्षी अर्थशास्त्र, प्रशांत प्रकाशन, जळगाव.

**Micro Economic Analysis II: M. A. I (Economics)**

**Preamble**

The course makes an attempt to provide an introduction to the advanced theories in Microeconomics and at the same time provide an understanding of the analytical rigour of the subject. Micro Economics is a core course that covers Consumer Choice, Concept of Revenue and Elasticity, Cost, Production Function, Concept of Surplus, Social Welfare. Microeconomics brings to the fore the practical significance of microeconomic theories.

**Course Objectives:**

1. To provide a thorough understanding of the basic economic problems of economics
2. To enable students to apply micro economic concepts in various contexts.
3. To enable understanding the basic theories in microeconomics such as, perfect and imperfect market structures.
4. To discuss the modern developments in micro economics such as game theory.

**SEMESTER II**

**PAEC-121: Micro Economic Analysis II**

**Lectures- 60 (Credits 4)**

**Learning Outcomes:**

1. Ability to apply the concepts of micro economics such as demand, supply, revenue, cost, elasticity, etc.
2. Ability to analyse and demonstrate knowledge of the basic theories/laws in economics- law of demand, law of supply, production function, etc.
3. At the end of the course, the student should be able to evaluate microeconomic concepts, models and its use in real life situations.

**1. Market Structures**

**(6 Lectures)**

- 1.1 Classification of Markets – Perfect and Imperfect
- 1.2 Perfect Competition – Characteristics
- 1.3 Short Run and Long Run Equilibrium of a Firm and Industry

**2. Monopoly**

**(16 Lectures)**

- 2.1 Monopoly – Meaning and Characteristics
- 2.2 Short Run & Long Run Equilibrium under Monopoly
- 2.3 Price Discrimination under Monopoly, Degrees of Price Discrimination
- 2.4 Comparison of Monopoly and Perfectly Competitive Market outcomes
- 2.5 Regulation of Monopoly Power

**3. Monopolistic Competition**

**(16 Lectures)**

- 3.1 Monopolistic Competition – Meaning and Characteristics
- 3.2 Price and Non-price competition, Equilibrium
- 3.3 Product Differentiation, Selling Costs and Excess Capacity

**4. Oligopoly**

**(16 Lectures)**

- 4.1 Oligopoly – Meaning and Characteristics
- 4.2 Basic market structure, Kinky Demand Curve, Price and Output Determination

4.3 Non-collusive oligopoly, Cournot- Bertrand Solution

4.4 Collusive Oligopoly, Price Leadership, Cartels

## 5. Introduction to Game Theory

(6 Lectures)

5.1 Game Theory, Basic Concepts, Dominant Strategy Equilibrium

5.2 Nash Equilibrium, Repeated and Sequential Games

### Basic Reading List:

1. H. L. Ahuja (2019) Advanced Economy Theory Microeconomic Analysis – S. Chand Publication, New Delhi
2. Misra S.K. and V.K. Puri (2001): Advanced Microeconomic Theory, Himalaya Publishing House, New Delhi.
3. Mansfield, E. (1997), Micro Economics, W. W. Norton and Company, New York.
4. Mankiw, N.G. (2002), Principles of Economics, Thomson Asia Pvt. Ltd., Singapore.
5. Salvatore, D. (2003), Micro Economics, Oxford University Press.
6. भावे, केळकर, मूल्य सिद्धांत, महाराष्ट्र ग्रंथ निर्मिती मंडळ, पुणे.
7. चव्हाण, प्रगत सूक्ष्म लक्षी अर्थशास्त्र, प्रशांत प्रकाशन, जळगाव

### Recommended Readings:

1. Arthur O'Sullivan (2013) Micro Economics: Principles, Applications and Tools, Pearson Publication
2. Dominick Salvatore (2003) Principles of Microeconomics, OUP, 5th Edition
3. Hirschleifer J and A. Glazer (1997): Price Theory and Applications, Prentice Hall of India, New Delhi.
4. James Gerber (2012) Microeconomics, Pearson Publication New Delhi
5. Kreps, David, M (1990): A Course in Microeconomic Theory, Princeton University Press.
6. Pindyck, Robert S Rubinfeld, Daniel L, Mehta, Prem (2009) Microeconomics, Pearson India
7. Sen, A. (1999): Micro Economics: Theory and Applications, Oxford University Press, New Delhi.
8. Stigler, G (1996): Theory of Price, Prentice Hall of India, New Delhi.
9. Varian, Hal (1996): Intermediate Microeconomics, W.W. Norton and Company, New York.
10. William J. Baumol and Alan H. Blinder (2005) Microeconomics-Principles and Policy



**Recommended Journals:**

1. Studies in Micro Economics- Sage Journal
2. The Indian Economic Journal- Sage Journal
3. Applied Economics- Taylor & Francis Online

**Public Economics I : M. A. (Economics)**

**Preamble**

There has been a considerable change in the role of the government in modern times. Traditionally, Public Finance was applied to the policies and operation of revenue, expenditure and debt, while the applications have extended to resource utilization, distribution, equality, stabilization, etc. An understanding is provided on how political processes are instrumental in the fiscal policy processes and decision-making, supported by theoretical concepts and practical applications.

**Objectives:**

- 1) To develop an understanding of the changing role of the government and the fiscal functions of the modern governments.
- 2) To discuss and deliberate on the concepts and theories in public economies like public policy, principles of taxation, theories of public expenditure, etc.
- 3) To develop an understanding of various policies in public economics like fiscal policy, taxation policy, public debt policy, public expenditure policy etc.

**SEMESTER-I**  
**PAEC-112: Public Economics I**

**Lectures 60 (Credits 4)**

**Learning Outcomes:**

- 1) Ability to recognize, apply and analyze concepts and theories in public economics.
- 2) Ability to appraise and assess the theory of public economics in real life situations.

**1. Introduction (12 Lectures)**

- 1.1 Changing Role of Government – Fiscal Functions of Modern Governments - The Allocation Function, The Distribution Function, The Stabilization Function
- 1.2 Private Goods, Public Goods, Social Goods, Merit Goods, Club Goods, Sin Goods

**2. Rationale for Public Policy (16 Lectures)**

- 2.1 Allocation of Resources- Provision of Public Goods
- 2.2 Voluntary Exchange Models- Lindahl, Johansen and Samuelson
- 2.3 Impossibility of Decentralized Provision of Public Goods
- 2.4 Contributions of Paul Samuelson, Robert Musgrave, Hugh Dalton- Demand Revealing Schemes for Public goods
- 2.5 The Clarke Tax, The Tiebout Hypothesis

**3. Taxation (16 Lectures)**

- 3.1 Tax – Meaning and Classification
- 3.2 Principles of Taxation- Benefit and Ability to Pay Approaches
- 3.3 Theory of Incidence; Alternative concepts of Incidence
- 3.4 Allocative and equity aspects of Individual Taxes;
- 3.5 Theory of Optimal Taxation; Excess Burden of Taxes;
- 3.6 The problem of Double Taxation
- 3.7 Shifting of Tax Burden
- 3.8 Incidence under Market Structures

**4. Public Expenditure (16 Lectures)**

- 4.1 Wagner’s Law of Increasing State Activities
- 4.2 Pattern of Public Expenditure- Wiseman-Peacock Hypothesis; Pure Theory of Public Expenditure- Samuelson (Collective Consumption Goods); Crowding-out Hypothesis
- 4.3 Structure and Growth of Public Expenditure
- 4.4 Criteria for Public Investment; Social Cost-Benefit Analysis, Project Evaluation, Estimation of Costs, Discount Rate

**Reference Books**

## M. A. I (Economics)

1. Goode, R. (1986), Government Finance in Developing Countries, Tata McGraw Hill, New Delhi.
2. Houghton, J.M. (1970), The Public Finance: Selected Readings, Penguin, Harmondsworth.
3. Rajesh K.Jha (2012) Public Finance. Pearson Publication New Delhi
4. Musgrave, Richard A and Musgrave, Peggy B (1989), Public Finance in Theory and Practice, Tata McGraw Hill
5. Stiglitz, Joseph E (1999), Economics of the Public Sector, W. W. Norton and Company

### **Recommended Readings:**

1. Buchanan, J.M. (1968), The Demand and Supply of Public Goods, Rand McNally, Chicago
2. Cornes, R. and T. Sandler (1986), The Theory of Externalities, Public Goods and Club Goods, Cambridge University Press, Cambridge.
3. Duff, L. (1997), Government and Market, Orient Longman, New Delhi. Herber, B.P. (1967)
4. Modern Public Finance, Richard D. Irwin, Homewood. Spulber, N. (1998), Redefining the State, Cambridge University Press, Cambridge.
5. Dorfman, R. (Ed.) (1970), Measuring the Benefits of Government Investment, Brookings Institution, Washington.
6. Herber, B.P. (1967), Modern Public Finance, Richard D. Irwin, Homewood
7. Mueller, D.C. (1979), Public Choice, Cambridge University Press, Cambridge.
8. Spulber, N. (1998), Redefining the State, Cambridge University Press, Cambridge.
9. Stiglitz, J.E. (1986), Economics of Public Sector, Norton, New York.

### **Recommended Journals:**

1. Journal of Public Economics- Science Direct
2. South Asian Journal of Macroeconomics and Public Economics- Sage Journals
3. Journal of Public Economics-Elsevier

**Public Economics II : M. A. (Economics)**

**Preamble**

There is considerable change in the public economics in modern economies. Public Finance was applied to the policies and operation of public debt, budgets, deficits as well as fiscal federalism, with understanding of the fiscal policy in the management and responsibility context. An understanding is provided on the reforms and change in government finances, supported by theoretical concepts and practical applications.

**Objectives:**

1. To develop an understanding of various policies in public economics like fiscal policy, public debt policy, fiscal finances, etc.
2. To help the students to understand the normative policies and compare it with the policies framed and followed by Indian economy.
3. To impart information to the students about the reforms like taxation reforms in India.

**SEMESTER-II**  
**PAEC-122: Public Economics II**

**Lectures 60 (Credits 4)**

**Learning Outcome:**

- 1) Ability to understand, apply and analyze concepts-public debt, budget, fiscal policy in public economics.
- 2) Ability to interpret the theories relating to public economics in real life situations.
- 3) Ability to discuss and debate on the public finance and policies w.r.t. India

**1. Public Finance in India**

**(16 Lectures)**

- 1.1 Indian Tax System- Tax and Non-tax Revenue
- 1.2 Taxes in India - Direct and Indirect Taxes
- 1.3 Reforms in Direct and Indirect Taxes, Introduction to GST
- 1.4 Budget- Meaning and Components, Economic Classification of Budget, Balanced Budget Multiplier, Gender Budget- Concept, Objectives & Purpose
- 1.5 Budget Deficits and Their Implications

**2. Public Debt**

**(13 Lectures)**

- 2.1 Sources of Public Debt with respect to India
- 2.2 Burden of Public Debt on Indian Economy
- 2.3 Deficit financing, Public Borrowings and Level of Prices
- 2.4 Principles of Debt Management and Repayment

**3. Fiscal Policy**

**(13 Lectures)**

- 3.1 Objectives of Fiscal Policy in Countries like India, Interdependence between Fiscal and Monetary Policies
- 3.2 Fiscal Policy for Stabilization - Automatic v/s. Discretionary Stabilization
- 3.3 Fiscal Sector Reforms in India-Budget Management, Objectives of Fiscal Responsibility and Budget Management Act

**4. Indian Fiscal Federalism**

**(18 Lectures)**

- 4.1 Fiscal Federalism in India- Meaning and Relevance
- 4.2 Vertical and Horizontal Imbalance
- 4.3 Assessment of Function and Sources of Revenue
- 4.4 Constitutional provisions; Finance Commission
- 4.5 NITI Aayog – Origin and Role

## M. A. I (Economics)

4.6 Devolution of Resources and Grants

4.7 Theory of Grants; Resource transfer from Union to States — Criteria for Transfer of Resources

4.8 Centre-State Financial Relations in India

### **Reference Books**

1. Bhatia H.L “Public Finance “Vikas Publishing House, 18th edition
2. Jha Rajesh K. (2012) Public Finance. Pearson Publication New Delhi
3. Mankar & Sharma (2001) “Public Finance Theory & Practice, Himalaya Publishing
4. Stiglitz, Joseph E (1999), Economics of the Public Sector, W. W. Norton & Co
5. Tyagi B.P., Public Finance, Jai Prakash Nath Publisher, Meerat (UP).

### **Recommended Readings:**

1. Shome, P. (Ed.) (1995), Tax Policy : Handbook, Tax Division, Fiscal Affairs Department, International Monetary Fund, Washington D.C.
2. Tripathy R.N. (2002) Public Finance in Underdeveloped Countries, Indus Publishing Company
3. Rajesh K.Jha (2012) Public Finance. Pearson Publication New Delhi
4. Gopalan Swapna (2008) Gender Budgeting: Concepts and Experiences, ICFAI University Press
5. Gopalan Swapna (2008) Gender Budgeting in India: Towards achieving Gender Equity, ICFAI University Press
6. Mundle Sudipto (2005) “ Public Finance: Policy Issues for India” Oxford University Press
7. Rangarajan C, D. K. Srivastava (2011) Federalism and Fiscal Transfers in India’ OUP, India
8. Y. V. Reddy, G. R. Reddy (2019) ‘Indian Fiscal Federalism’ Oxford University Press
9. Latest Budget Papers- Government of India
10. Economic Survey (Annual)

### **Recommended Journals:**

1. Journal of Public Economics- Science Direct
2. South Asian Journal of Macroeconomics and Public Economics- Sage Journals
3. Indian Journal of Finance
4. The Indian Economic Journal- Sage Journals

## **International Trade: M.A. (Economics)**

### **Preamble**

International Trade is subject that is ever dynamic and relevant in the current context. International Trade provides a framework on international trade and finance in the theoretical context, along with economic analysis as well as practical applications. The subject discusses Classical and modern trade theories, Terms of Trade, Trade Policy, and Trade Agreements and Trade Organizations. Various issues discussed and analysed arising out of international trade.

### **Objectives:**

1. To develop an understanding of the theoretical concept in international trade.
2. To analyse international economics with reference to terms of trade, trade policy, trade agreements etc.
3. To provide knowledge to students regarding recent developments and changes in international banking, international banking agreements etc.
4. To make the students understand role of international economic organization and global crisis development.



**SEMESTER I**  
**PAEC-113: International Trade**

**Lectures: 60 (Credits 4)**

**Learning Outcomes:**

1. Ability to understand the concepts of international economics such as comparative cost, terms of trade, trade policies and trade agreements.
2. Ability to interpret and apply theory relating to international trade.
3. Ability to discuss and debate the effects of trade policy, trade agreements, exchange rate policies on the world economy/trade.

**1. Overview of Classical and Modern Trade Theories (20 lectures)**

- 1.1 The Theory of Comparative Cost- David Ricardo
- 1.2 The Heckscher-Ohlin Theorem- The Opportunity Cost Approach
- 1.3 Verification of Physical Criterion and Price Criterion
- 1.4 Leontief Paradox – Factor Price Equalization [Edgeworth Box Diagram]
- 1.5 New Theories of Trade, Product Life Cycle and Technology Gap Models
- 1.6 Preference Similarity and Intra-Industry Trade
- 1.7 Economies of Scale and Monopolistic Competition
- 1.8 Krugman- Theory of Economic Geography
- 1.9 Neo-Heckscher Ohlin Theorem

**2. Terms of Trade (8 lectures)**

- 2.1 Concepts of Terms of Trade, Factors affecting Terms of Trade
- 2.2 Gross & Net Barter Terms of Trade
- 2.3 Terms of Trade and Economic Development

**3. Trade Policy (16 lectures)**

- 3.1 Free Trade vs. Protective Trade
- 3.2 Tariffs and Non-Tariff Barriers on Trade
- 3.3 Effects of Tariffs under Partial Equilibrium. (Price Effect, Terms of Trade Effect, Competitive Effect, Income Effect, Revenue Effect)
- 3.4 Effects under General Equilibrium, Stolper-Samuelson Theorem

**4. Trade Agreements and Organization (16 lectures)**

- 4.1 Introduction to International Trade Agreements- Dunkel Proposal and WTO, Important Agreements
- 4.2 Major developments since 1995, Effects on the Indian Economy
- 4.3 Direction and Composition of the Global Trade Growth, Developing Countries and participation in Global Trade, Growth of Trade in Services

## Reference Books

### Basic Reading List:

1. Gupta, K.R.(latest edition): "International Economics", AtmaRam & Sons, Delhi
2. Kindleberger, C.P. International Economics, R.D. Irwin, Homewood
3. Salvatore, D. (1997), International Economics, Prentice Hall, New York
4. Salvatore, D. (Latest edition.) "International Economics", Prentice Hall, NY
5. Soderston, Bo (2005), International Economics, The Macmillan Press Ltd., London
6. Srivastava, O.S.(latest edition), "International Economics", Kalyani Publishers
7. जे, एफ. पाटील, पी. के. देशमुख, वि. बी. काकडे आर. ए. वाईगडे, बिज़नेस एन्व्हायर्नमेंट (२०१२)  
फडके प्रकाशन, कोल्हापूर
8. एस. एम. भोसले, डॉ. पी. एच. कदम, डॉ. सी. आर. जाधव, आंतरराष्ट्रीय अर्थशास्त्र (२०१९), फडके  
प्रकाशन, कोल्हापूर

### Recommended Readings:

1. Chacholiades, M. (1990), International Trade: Theory and Policy, McGraw Hill.
2. Paul R. Krugman & Maurice Obstfeld (2009) International Economics Theory and Policy. Pearson Education Publication New Delhi
3. James Gerber (2012) International Economics Pearson Publication. ND
4. Paul, Justin (2004) ed., "International Business", Prentice-Hall India Pvt. Ltd
5. Pugel T.A (2008) "International Economics", Tata McGraw-Hill
6. Salvatore, D (2004) "Theory and Problems of International Economics" Schaum's Outline Series, Tata McGraw Hill Publishing Co. Ltd., New Delhi.
7. Sawyer, W.C and Sprinkle, R.L (2003) "International Economics", Pearson Education
8. Williamson, J & Milner, C (1991): "The World Economy-A Textbook International Economics", New York University Press, N. York.

### Recommended Journals:

1. Journal of International Economics- Elsevier
2. The Journal of International Trade and Economic Development- Taylor and Francis Online
3. Foreign Trade Review- Sage Journals

## **International Finance: M.A. (Economics)**

### **Preamble**

International Economics is subject that is relevant in the current context. International Finance provides an understanding of the various aspects of International Finance in the analytical context along with a theoretical background. The subject discusses Balance of Payments, Foreign Exchange, Risk, Currency Management as well as international capital flows. Various topics are discussed and analysed that relate to international finance, banking and markets.

### **Objectives**

1. To develop an understanding of the theoretical concept in international finance- Balance of Payments, exchange rate policies, capital flows, etc.
2. To compare and contrast the scenarios on international trade in India vis-à-vis the world economy.
3. To provide knowledge to students regarding recent developments and changes in international banking, international banking agreements etc.
4. To make the students understand role of international economic organization and global crisis development.

**SEMESTER II**  
**PAEC-123: International Finance**

**Lectures: 60 (Credits 4)**

**Learning Outcome:**

1. Ability to understand and interpret the concepts such as Balance of Payments, Exchange Rates, Foreign Exchange transactions, International capital flows, etc.
2. Ability to critically analyse the effects of deficits, exchange risk, role of foreign capital on the world economy/trade.
3. Ability to discuss and debate on subjects related to international trade and finance w.r.t the Indian Economy.

**1. Balance of Payment (16 Lectures)**

- 1.1 Balance of Trade- Concept, Structure & Components
- 1.2 Balance of Payments- Concept, Disequilibrium, Causes of Disequilibrium
- 1.3 Correction of Disequilibrium-Automatic Correction, Deliberate Correction
- 1.4 Foreign Trade Multiplier- Meaning, Working, Implications & Limitations
- 1.5 Policies for Internal and External Balance-Fiscal and Monetary Policy Under Fixed and Floating Exchange Rates
- 1.6 Devaluation of Indian Rupee- Effect on Balance of Payment in 1991

**2. Foreign Exchange (16 lectures)**

- 2.1 Components of Foreign Exchange Market- Transfer of Purchasing Power, Provision of Credit, Provision of Hedging Facilities
- 2.2 Transactions in the Foreign Exchange Market- Options, Forwards, Futures, and Swap, Concept of Arbitrage, Hedging and Speculation; Types of Risk in International Markets
- 2.3 Determination of Rate of Exchange- Purchasing Power Parity Theory, Balance of Payments Theory, Monetary Models
- 2.4 Exchange Control-Scope of Exchange Control, Objectives and Methods of Exchange Control
- 2.5 Exchange Rate Systems- Fixed and Flexible Exchange Rates-Case for and against Fixed and Flexible Exchange Rates

**3. International Capital Flows (12 lectures)**

- 3.1 Classification of International Capital Flows-Direct and Portfolio Investment, Government, Institutional and Private Capital, Short term and Long term Capital, Home and Foreign Capital, Foreign Aid
- 3.2 Importance and Role of Foreign Capital-Trade and Investment, Theories of International Investment, Factors Affecting International Capital Movements
- 3.3 Current and Capital Account Convertibility- Concept and Prerequisites, Developments on Convertibility in the Indian Context

### 3.4 Foreign Exchange Management Act- Objectives and Features

#### **4. International Banking (16 lectures)**

4.1 International Banking- Concept, Classification - Offshore Banking Unit, Foreign Banks, Foreign Subsidiaries/ Affiliates, Correspondent Banks

4.2 International Banking Laws- Choice of Law, Proper Law, Use of Language and Nature of Legal Disputes;

4.3 International Banking Agreements-Basel Norms; Introduction to LIBOR

4.4 Changing Role of International Economic Organizations- IMF and IBRD (World Bank)- Global Crisis and Development, Introduction to BRICS Bank

#### **Reference Books**

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

1. Gupta, K.R.(latest edition): "International Economics", Atma Ram & Sons, Delhi
2. Indian Institute of Banking & Finance (2011) 'International Banking'
3. Kindleberger, C.P. International Economics, R.D. Irwin, Homewood.
4. Salvatore, D. (1997), International Economics, Prentice Hall, Upper Saddle River, N.J., New York.
5. Srivastava, O.S. (latest edition), "International Economics", Kalyani Publishers
6. जे. एफ. पाटील, पी. के. देशमुख, वि. बी. काकडे आर. ए. वाईगडे, बिज़नेस एन्व्हायर्नमेंट (२०१२) फडके प्रकाशन, कोल्हापूर
7. एस. एम. भोसले, डॉ. पी. एच. कदम, डॉ. सी. आर. जाधव, आंतरराष्ट्रीय अर्थशास्त्र (२०१९), फडके प्रकाशन, कोल्हापूर

##### **Recommended Readings:**

1. Ellsworth P.T., (1969) 'The International Economy' New York Macmillan Publishing Co.
2. Frederic Mishkin and Stanley Eakins (2006) "Financial Markets and Institutions", Pearson 5th Ed.
3. Heller, Robert H., (1968) 'International Trade' Prentice Hall, Englewood Cliffs
4. Indian Institute of Banking & Finance (2017) 'International Banking Legal & Regulatory Aspects'
5. Joyce Joseph (2013) 'IMF and the Global Economic Crisis' Cambridge University Press
6. O'Neill Jim (2013) 'The Growth Map: Economic Opportunity in BRICS and Beyond' Penguin, UK
7. Sharma Ruchir (2013) 'Breakout Nations: In pursuit of Next Economic Miracles' Penguin UK
8. Sharma Ruchir (2017) 'The Rise and Fall of Nations' Penguin UK
9. Verghese, S.K., (1986) 'Foreign Exchange and Financing of Foreign Trade', Vikas Publishing House, New Delhi.

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10. Williamson, J & Milner, C (1991): 'The World Economy-A Textbook in International Economics', New York University Press, N. York.

**Recommended Journals:**

1. Journal of International Economics- Elsevier
2. Journal of Finance- Wiley Online
3. Journal of Emerging Market Finance- Sage Journals
4. Journal of Financial Economics-Elsevier /Science Direct

## **Agricultural Economics: M. A. I (Economics)**

### **Preamble**

Agricultural Economics is an applied field in economics; the subject provides an understanding of the production and distribution of agricultural goods and an overall understanding of the agricultural value chain. Agricultural Economics provides an understanding of the various aspects of agriculture and its value chain - productivity, labour, credit, markets for farm products, with appropriate economic analysis. The subject discusses agrarian structures with respect to growth, employment, efficiency and prices as well as incomes. It is important to analyse the challenges to agriculture in the context of emerging economies.

### **Course Objectives:**

1. To develop an understanding of agricultural economics in the theoretical as well as practical context.
2. To discuss and debate the various issues and challenges faced by agrarian economies w.r.t. production, productivity, efficiency, employment, etc.
3. To understand the latest developments in the agriculture sector such as government initiatives to improve productivity, precision farming, digital technology etc

**SEMESTER-I**

**PAECELE-114: Agricultural Economics**

**Lectures 60 (Credits 4)**

**Learning Outcomes:**

1. Ability to analyse and evaluate the subject with reference to various aspects of agrarian economies.
2. Ability to develop an understanding of agriculture with its intricacies and imperfections and to be able to construct intellectual dialogue on the challenges of agriculture.

**1. Introduction (10 Lectures)**

- 1.1 Meaning and scope of agricultural economics
- 1.2 Necessity to study agricultural economics separately
- 1.3 Agrarian Structure in India since 1991
- 1.4 Review of Agricultural Growth in India in post reform period
- 1.5 Barriers to Agricultural Growth in India

**2. Agriculture Productivity and Agricultural Labour (13 Lectures)**

- 2.1 Trends in Agricultural Productivity in India since 1991
- 2.2 Challenges to Agricultural Productivity– Crop Insurance, Irrigation, Exports
- 2.3 Need for Policy Intervention – Productivity, Equity and Sustainability
- 2.4 Technological developments in Agriculture –irrigation, seeds, fertilizers
- 2.5 Agricultural Labour- Nature and Problems

**3. Agriculture and Credit (12 Lectures)**

- 3.1 Rural Credit – Significance and Sources – institutional and non-institutional
- 3.2 Role of NABARD, Commercial Banks and Cooperative Institutions
- 3.3 Micro Finance in Rural Finance – Emergence, Role and Challenges
- 3.4 Challenges to Agricultural Credit in India

**4. Agriculture and Markets (13 Lectures)**

- 4.1 An Overview of The Agricultural Value Chain
- 4.2 Characteristics of Agricultural Markets in India



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4.3 Agriculture and Price System in India

4.4 Role of Farmers' Marketing Cooperatives

4.5 Agro Processing- Need and Challenges

4.6 Agriculture in India and WTO Agreements

## **5. Agricultural Growth and Rural Development (12 Lectures)**

5.1 Agricultural revolutions in India

5.2 Food Security in India – PDS, TPDS

5.3 Policies for Sustainable Agriculture in India

### **Reference Books**

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

1. Subha Reddy (2008) 'Agricultural Economics' OUP
2. Agrawal A.N.(Latest Edition) Indian Economy Problem of Development and Planning
3. Datt R.& K.P.M Sundharm (Latest Edition) Indian Economy, S. Chand & Co.
4. Misra S.K.& V.K.Puri (Latest Edition) Indian Economy, Himalaya Publication House Mumbai.

#### **Recommended Readings:**

1. Ajit Singh and Hamid Tabatabai (1993) 'Economic Crisis and Third World Agriculture', Cambridge University Press
2. B.N.P Singh (2004) 'Indian Economy Today Changing Contours' .Deep and Deep Publications
3. C.S.Prasad (2006) 'Sixty years of Indian Agriculture'–New Delhi
4. Dewett Kewal (2005) Indian Economy C. Chand &Co. Ltd, New Delhi
5. Gopalji & Suman Bhakari (2012) 'Indian Economy Performance and Policies, Pearson Publication Delhi
6. Gulati & Kelley(1999), 'Trade Liberalization of Indian Agriculture' OUP
7. Hansra Parumal and Chandrakarn–'Modernization of Indian Agriculture in the 21st Century- Challenges, Opportunity and Strategies' Concept Publication Co. New Delhi.
8. Johnson P.A Development Issues of Indian Economy (2003) Manan Prakashan
9. Kapila Uma (ed.) Indian Economy Since Independence, Academic Foundation (2003)
10. Mamoria C.B.(2005) 'Agricultural Problems of India' Kitab Mahal Pub.
11. M.P.Singh (2004) 'Indian Economy Today-Problems Planning and Development' Deep and Deep Publication.

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12. Singh Acharya, Sagar (2002) 'Sustainable Agricultural Poverty and Food Securities' Rawat Publications Jaipur Vol-I&II
13. S. Mahendra Dev (2010) Inclusive Growth in India: Agriculture, Poverty and Human Development, OUP
14. Norton George W. And Jeffery Alwang (1993) 'The Introduction to Economic and Agricultural Development' McGraw Hill Co. Publication

**Recommended Journals:**

1. Journal of Agricultural Economics- Wiley Online
2. The Indian Economic Journal- Sage Journals
3. International Journal of Agricultural Economics- Science Publishing
4. American Journal of Agricultural Economics-Oxford Academic
5. Journal of Agricultural and Applied Economics- Cambridge University Press
6. Economic & Political Weekly

### **Statistical Techniques: M. A. I (Economics)**

#### **Preamble**

The role of Statistics is important as well as relevant in Economics. The use of Statistics can provide a better understanding of various topics discussed and studied under economics. Statistical tools and techniques help understand, discuss and appreciate various topics under micro and macroeconomics better. Besides, applied subjects in economics make use of statistical tools and techniques to provide more elaborate and enhanced understanding of issues and challenges in the real world.

#### **Course Objectives:**

1. To provide an understanding of Statistics and its application under various topics under economics.
2. To demonstrate the practical and the applied aspects of economics with the help of Statistical techniques.

**SEMESTER-I**

**PAECELE-114: Statistical Techniques**

**Lectures 60 (Credits 4)**

**Learning Outcomes:**

3. Ability to develop, demonstrate and examine various topics under economics with the help of statistical techniques.
4. Ability to examine subject areas in economics with the use of statistical tools.

**1. Descriptive Statistics**

**(12 Lectures)**

1.1 Collection, Organization and Presentation of Data

1.2 Measures of Central Tendency and Dispersion-Mean, Median, Mode, Standard Deviation, Variance, Covariance and Correlation Coefficients

1.3 Correlation and Regression Analysis

1.4 Measures of Skewness and Peakedness

**2. Sampling and Sampling Methods**

**(8 Lectures)**

2.1 Sample and Population, Parameters and Statistics

2.2 Variables and Attributes; Sampling and Non-sampling Errors

2.3 Types of Sampling

**3. Theory of Probability**

**(16 Lectures)**

3.1 Probability, Distribution, Events Spaces, probability axioms and properties;

3.2 Joint, Marginal and Conditional Probability- Certainty & Uncertainty conditions, Bayes' rule

3.3 Random Variable: Expectation and Distribution

3.4 Addition and Multiplication Theorems

3.5 Probability Distribution, Discrete and Continuous and Expected Values

3.6 Probability Distribution Function-Binomial, Poisson

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3.7 Normal T-test, Chi-square

#### **4. Statistical Estimation and Testing of Hypothesis**

**(16 Lectures)**

4.1 Types of Estimators and their Properties

4.2 Sampling Distribution for Sample Mean and Proportion

4.3 Point and Interval Estimation

4.4 Null and Alternate Hypothesis

4.5 Level of Significance & Level of Confidence, Confidence Limits, Critical Region, Tests of Significance-Type I and II Errors

#### **5. Time Series**

**(8 Lectures)**

5.1 Nature and Decomposition of a Time Series-Trend

5.2 Cyclical, Seasonal and Random Components

5.3 Fitting Trend Curves

#### **References / Basic Reading List:**

1. Anderson David & al (2015) 'Statistics for Business and Economics', 12th Edition, Cengage India
2. Gupta S.C. (Latest Edition) 'Fundamentals of Applied Statistics' Sultan Chand & Sons
3. Gupta S.C. (2014) 'Fundamentals of Mathematical Statistics' Sultan Chand & Sons
4. Nagar A.L. & Das R.K. (1997) 'Basic Statistics' 2nd Edition, OUP
5. Rohatgi Vijay K., A.K. Md. Ehsanes Saleh (2008) 'An Introduction to Probability and Statistics, Wiley, 2nd Edition
6. Vohra N.D. (2017) "Business Statistics' McGraw Hill Education

#### **Recommended Reading:**

1. Croxton F. E and Cowden D. J. (1968) 'Applied General Statistics' Pitman Publishing
2. Croxton F. E and Cowden D. J. (2012) 'Practical Business Statistics' Literary Licensing, LLC

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3. Keller Gerald (2015) Statistics for Management and Economics, South Western Lind, Marchal and Wathen (2017) 'Basic Statistics for Business and Economics' McGraw Hill Education, 7th Edition
4. Richard I. L, M. H. Siddiqui, D S. Rubin, Sanjay Rastogi (2017) Statistics for Management and Economics' 5th Edition, Pearson Education

**Recommended Journals:**

1. Journal of International Economics- Elsevier
2. Journal of Finance- Wiley Online
3. Journal of Applied Statistics- Francis & Taylor
4. Journal of Statistics Education- Francis & Taylor

## **Labour Economics: M. A. I (Economics)**

### **Preamble**

Labour Economics is a specialized area in economics; the subject covers the study of labour, the industrial structure and industrial relations. Labour Economics provides an understanding of the various aspects of labour markets on structure, division of labour, employment and wage determination with a relevant theoretical background. The subject discusses labour markets, wages and wage determination, labour dynamics and industrial relations. Various contemporary topics are discussed and analysed such as migration, absenteeism, wage differentials and social security under labour economies.

### **Objectives:**

1. To develop an understanding of labour economics in the theoretical as well as practical context.
2. To discuss and debate the various issues and challenges faced by labour with reference to division of labour, employment, wage determination, etc.
3. To demonstrate on the various aspects of labour dynamics and labour relations w.r.t. India

**SEMESTER-II**  
**PAECELE-124: Labour Economics**

**Lectures 60 (Credits 4)**

**Learning Outcomes:**

1. Ability to analyse and evaluate the subject with reference to various aspects of Labour economics.
2. Ability to develop an understanding of the labour with its intricacies and imperfections and to be able to construct intellectual dialogue on the challenges of labour w.r.t. the Indian Economy.

**1 Introduction**

**(12 Lectures)**

- 1.1 Labour Economics as a Discipline
- 1.2 The “Old” and “New” Economic Perspective
- 1.3 Concept of Labour Force, Determinants of Labour Force Participation
- 1.4 Historical Emergence and Relevance of Labour Economics
- 1.5 Indian Labour Market- Changing Structure and Impact of Globalization
- 1.6 Unemployment in India and Policies for Employment Generation

**2 Labour Markets and Wage Determination**

**(14 Lectures)**

- 2.1 Labour Markets- Rural & Urban, Formal and Informal, Organized and Unorganized, Contract Labour
- 2.2 Growth and Trends in Labour Market,- New Legislation, Unionization, Labour Dynamics, Labour Market Flexibility
- 2.3 Theories of Wages- Marginal Productivity Theory, Theory of Collective Bargaining, Modern Theory of Wages- Demand and Supply Theory
- 2.4 Wage Structure, Minimum Wage, Fair Wage, Wage Differentials- Inequality, Inter-sectorial Differences, Gender Differences
- 2.5 Evolution and Features of Wage Policy in India

**3 Migration and Absenteeism**

**(10 Lectures)**

- 3.1 Approaches to Labour Migration, Inter-sectorial and International Migration
- 3.2 Trends, Causes and Effects of Migration
- 3.3 Labour Turnover and Absenteeism in Labour Markets in India- Causes, Effects and Policy Measures

**4 Industrial Relations**

**(12 Lectures)**

- 4.1 Labour Unions in India- Growth, Structure and Development
- 4.2 Employers’ Organization in India- History, Emergence and Role
- 4.3 Globalization and Labour Markets- International Division of Labour, Impact on Developing Economies



4.4 Current trends in Collective Bargaining

4.5 Social Security Measures

## **5 Labour Market reforms**

**(12 Lectures)**

5.1 Exit Policy since 1991, Need for an Effective Policy

5.2 Child Labour in India- Cause for Concern and Policy Measures

5.3 Women Workforce- Need for equal Opportunity, Skill and Earnings

5.4 Contract Labour- Increasing Use and Need for Regulation

### **Reference Books**

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

1. Pierre C (2015) 'Labour Economics' Prentice Hall India
2. Alan Mountjoy (2007) 'Industrialization and Underdeveloped Countries' Adline Transaction
3. Joshi M. V. (1999) 'Labour Economics and Labour Problems' Atlantic
4. McConnell, C.R. And S.L. Brue (1986), Contemporary Labour Economics, McGraw-Hill, New York

#### **Reference Books:**

1. Datt, G (1996), Bargaining Power, Wages and Employment: An Analysis of Agricultural, Labour: Markets in India: Sage Publications, New Delhi
2. Dasgupta Sukti, Sher Singh Verick (2016) 'Transformation of Women at Work in Asia-An Unfinished Development Agenda' (Ed.) Sage Publication
3. Flanagan Robert J. (2006) 'Globalization and Labor Conditions: Working Conditions and Worker Rights in a Global, OUP
4. Hajela, P.D. (1998), Labour Restructuring in India: A Critique of the New Economic Policies, Commonwealth Publishers, New Delhi.
5. Jhabvala, R.and R.K. Subrahmanya (Eds) (2000), The Unorganized Sector: Work Security and Social Protection: Sage Publications, New Delhi
6. Lester R. A. (1964) 'Economics of Labour, Macmillan, NY, 2nd Edition
7. Papola, T.S.P.P. Ghosh, A.N.Sharma (Ed.) (1993). Labour, Employment and Industrial Relations in India, B. R. Publishing Corporation, New Delhi
8. Rosenberg M.R. (1988), 'Labour Markets in Low Income Countries' in Edited Book by Chenery H. B. and T.N. Srinivasan "The Handbook of Development Economics" North Holland, New York
9. Venkataratnam, C.S. (2001), Globalization and Labour- Management Relations: Dynamics of Changes, Sage Publications/Response Books, New Delhi.

#### **Recommended Journals:**

1. Indian Journal of Labour Economics- Springer
2. The Indian Journal of Industrial Relations- JSTOR
3. Management and Labour Studies- Sage

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4. Economic and Political Weekly

## **Mathematical Economics: M. A. I (Economics)**

### **Preamble**

The role of Mathematics is important in Economics. The use of Mathematics can provide a better understanding of various areas under Economics with mathematical applications to economic theories and with the help of modelling techniques. Mathematical applications help understand, discuss and appreciate micro and macroeconomics concepts and theories better. Besides, applied economics make use of mathematical applications to provide more elaborate and enhanced understanding of challenges in the real world.

### **Objectives:**

1. To provide an understanding of Mathematics and its application under various topics under economics.
2. To demonstrate the practical and the applied aspects of economics with the help of Mathematics.

**SEMESTER-II**  
**PAECELE-124: Mathematical Economics**

**Lectures 60 (Credits 4)**

**Learning Outcomes:**

1. Ability to develop, demonstrate and examine various topics under economics with the help of Mathematics.
2. Ability to evaluate and examine subject areas in economics with the mathematical economics.

**1. Review & Basic Applications in Economics (8 lectures)**

- 1.1 The concept of Sets, Real and Number System
- 1.2 Identities, Equations and Inequalities
- 1.3 Power of Number; Logarithms and their Properties
- 1.4 Binomial Theorem; Sequences and their Formulas

**2. Functions of a Single & Multiple Dependent Variable: (18 lectures)**

- 2.1 Algebraic, Exponential and Logarithmic
- 2.2 Explicit, Implicit, and Inverse Functions
- 2.3 Polynomial Functional Diagrammatic Representation of Higher Order Function of a Single Variable
- 2.4 Market Demand, Supply Curves, Total Revenue, Cost Functions
- 2.5 Extensions of function - More than two independent variables
- 2.6 Indifference Curves, General Production Function, Isoquants
- 2.7 Production Possibility Frontiers and its use in Economics

**3. Matrix Algebra (12 lectures)**

- 3.1 Elementary operations of Addition, Multiplication etc.
- 3.2 Transpose and Inverse of Matrices. Rank of a Matrix
- 3.3 Determinants – third-order determinants, minors and cofactors
- 3.4 Laplace expansion and Higher-Order determinants
- 3.5 Special Determinants – The Jacobian, The Hessian

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3.6 Solution of Simultaneous Equation using Matrices – Cramer's Rule

**4. Differential Calculus (12 lectures)**

4.1 Limits of functions, Continuity at a point, Over and Interval

4.2 Rules of Differentiation Including Product, Quotient, and Chain Rule

4.3 Derivatives of Implicit Functions, Partial Derivatives, Constrained Optimization

4.4 Profit Maximization in the different types of Markets

4.5 Price Discrimination by Monopolist to Maximize Profits

**5. Integration (10 lectures)**

5.1 Indefinite integral of Algebraic, Exponential and Logarithmic Functions

5.2 Define Integrals

5.3 The relation between Average and Marginal concepts

5.4 Capital values under Continuous Interest

**Reference Books**

**Basic Reading List:**

1. Chiang A. C (2017) 'Fundamental Methods of Mathematical Economics' McGraw Hill Education
2. Edward Dowling (2011) 'Schaum's Outline of Introduction to Mathematical Economics' 3rd Edition (Schaum's Outlines), McGraw Hill Education
3. Simon Carl P. and Blume Lawrence (1994) 'Mathematics for Economists' W. W. Norton & Co.

**Reference Books:**

1. Simpson Carl P. (2010) 'Mathematics for Economics' Viva Books
2. Hoy (2012) Mathematics for Economics, Prentice Hall India
3. Pemberton Malcolm, Nicholas Ray (2016) 'Mathematics for Economists' Manchester University Press
4. Rosser M. J. (1993) 'Basic Mathematics for Economists' Routledge
5. Sydsaeder Knut, Hammond p., Strom A. (2013) 'Essential Mathematics for Economics' Pearson Education
6. Yamane Taro (1981) 'Mathematics for Economists: An Elementary Survey' Prentice Hall India Learning Private Ltd.

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**Recommended Journals:**

1. Indian Journal of Pure and Applied Mathematics-Springer
2. Journal of Mathematical Economics- Elsevier