

Micro Economics

I - M.A(Economics) / I- Semester

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Micro Economics

Module-I: Theory of Consumer Behaviour and Production

Alfred Marshall theory of Demand – Concept of Elasticity of demand: Price, Income and Cross Elasticities – Indifference curve analysis – Revealed Preference Theory – Theory of Production: Production Function, Law of Variable Proportions, Returns to Scale – Cost Curves: Fixed and Variable costs, Total, Average and Marginal cost curves – Revenue: Total, Average, Marginal Revenue and their interrelationship.

Module-II: Market Structures and Pricing

Classification of Markets – Perfect Competition: Features, Short run and long-run equilibrium of the firm and industry – Monopoly: Short run and long-run Equilibrium of the firm - price discrimination – Monopolistic Competition: Chamberlin's Group equilibrium – Product differentiation and Selling costs – Oligopoly: Price determination under Oligopoly.

Module-III: Theory of Distribution

Ricardian theory of Rent, Quasi rent – Wage fund theory and Subsistence theory – Marginal Productivity theory of wages – Loanable fund theory and Keynes liquidity preference theory of Interest – Dynamic and Innovation theories of profit.

Module-IV: General Equilibrium and Welfare Economics

Partial equilibrium and general equilibrium - Walrasian General Equilibrium - Welfare Criteria: The Paretian Optimality - Hicks and Kaldor Compensation Criteria - Pigovian Welfare Economics

Reading List

1. Ahuja, H.L. (2000), *Advanced Economic Theory: Micro Economic Analysis*, S.Chand & Company Ltd, New Delhi.
2. Archibald G.C. (Ed.), (1971), *Theory of the Firm*, Penguin, Harmondsworth.
3. Baumol, W.J. (1982), *Economic Theory and Operations Analysis*, Prentice Hall of India, New Delhi
4. Borch, K.H. (1968), *The Economic of Uncertainty*, Princeton University Press, Princeton.
5. Dacosta, G.C (1980), *Production, Prices and Distribution*, Tata Mc Graw Hill, New Delhi.
6. Dimond and Roths Child (Ed), (1978), *Uncertainty in Economics*, Academic Press, New York.
7. Hirshleifer, Jand Glazer (1997), *Price theory and Applications*, Prentice Hall of India, New Delhi.
8. John Von Neumann and Oskar Morgenstern, (1947), *Theory of Games and Economic Behavior*, (2nd Edition), Princeton University Press, Princeton.
9. Samuelson & Nordhaus. D.W, *Micro-economics*, McGraw-Hill/Irwin
10. Koutsoyiannis. A. (1979), *Modern Economics*, (2nd Edition), Macmillan Press, London.

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Macro Economics

Module-I: National Income, Consumption Behaviour and Investment

Circular Flow Of Income – Concepts of National Income – Methods and problems of Estimation – National Income Statistics of India – Consumption Function – Keynes Psychological Law of Consumption - Implications of the law – Theories of aggregate consumption: Absolute Income Hypothesis, Relative Income Hypothesis, Life Cycle Hypothesis, Permanent Income Hypothesis) – Investment – Determinants of Investment – Marginal Efficiency of Capital – Accelerator principle

Module-II: Business Cycles and Unemployment

Business Cycles – Models of Samuelson, Hicks Kaldor, Schumpeter, and Keynes – Meaning of Unemployment – Types of Unemployment – Wage-unemployment relationship, Adaptive expectations and rational expectations hypothesis.

Module-III: Inflation

Meaning of Inflation, Theories of Inflation, Demand pull or Monetary theory of inflation – Cost Push Inflation – Demand pull Vs Cost push inflation – Inflationary gap Stagflation – The Phillips Curve – The Relationship between Unemployment and Inflation Tobin’s modified Phillips Curve – Causes of inflation – Effects of inflation – Measures to Control Inflation

Module-IV: Keynesian Macroeconomic Theory

Determination of output and employment – Classical approach, Keynesian approach – Significance of the Keynesian Theory – supply side Economics – Relevance of Keynesian Economics to Underdeveloped Economies – Criticism of Keynesian Theory

Refading List

1. Ahuja H L, “Advanced Economic Theory – Microeconomic Analysis”, Sultan Chand and Co. Ltd., New Delhi, 2000.
2. Blanchard Olivier & Fischer Stanley. Lectures on Macroeconomics, MIT Press, Cambridge.
3. Hicks, J.R., The crisis in Keynesian Economics, Oxford University Press, New Delhi, 1974.
4. Lewis M. K. and P.D. Mizen, Monetary Economics, Oxford, 2000.
5. Levacic, R. and A. Rebman: Macroeconomics: An Introduction to Keynesian and Neo-Classical Controversies.
6. Mankiw, G & Romer D, “New Keynesian Economics” Vol-1 & 2, The MIT Press, Cambridge.
7. Rao, V.K.R.V., India’s National Income: 1950 to 1980, Sage Publications, New Delhi, 1983.
8. Shapiro, E., Macroeconomic Analysis, Galgotia Publications, New Delhi, 1996.
9. Samuelson and Nordhaus, “Economics”, Tata McGraw-Hill Pub. Co. Ltd., New Delhi, 2002.
10. Thorn, R.S. Edited, “Monetary Theory and Policy” Praeger Publishers, New York, 1976.

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Module-I: Objectives and Principles of Public Finance

Meaning, Definitions, Origin and Scope of Public Finance – Objectives of Public Finance – Functions of Modern State – Classical, Keynes and Musgrave views on the Theory of the Public Finance – Principle of Maximum Social Advantage - Ability to Pay Theory.

Module-II: Public Revenue and Principles of Taxation

Sources of Public Revenue: Tax and Non-Tax Revenue - Direct and Indirect Taxes – Merits and Demerits of Direct Taxes – Merits and Demerits of Indirect Taxes - Canons of Taxation - Characteristics of a Good Tax – Progressive, Proportional, Regressive and Digressive Taxes – Effects of Taxation.

Module-III: Public Expenditure and Public Debt

Role of Public Expenditure – Causes for the Growth of Public Expenditure – Principles of Public Expenditure - Wagner’s Law of Increasing State Activities - Peacock and Wiseman Hypothesis - Public Debt: Objectives of Public Debt – Sources of Public Debt : Internal and External Sources – Economic effects of Public Debt - Public Debt in India.

Module-IV: Federal Finance and Budgets

Principles of Federal Finance – Transfer of Financial Resources from Centre to States - Finance Commission – Functions of Finance Commission -Recommendations of 15th Finance Commission (Latest) – Trends in Central finances in India - Trends in State finances in India -Analysis of the Union Budget (Latest) –Analysis of A.P. State Budget (Latest).

References

1. Musgrave, Richard A. and Musgrave Peggy B, *Public Finance in Theory and Practice*, Mc Graw-Hill, 5th Edn. 1989.
2. Dalton, Hugg, *Public Finance*
3. Tyagi, B.P. *Public Finance*, Jai Prakash Nath Publications, Meerut, U.P.
4. Sundaram, K.P.M and Andley, K.K, *Public Finance -Theory and Practice*, S.Chand & Company Ltd, New Delhi.
5. Om Prakash, *Public Economics-Theory and Practice*, Vishal Publishing Company, New Delhi.
6. Amaresh Bagchi, *Readings in Public Finance*, Oxford University Press, New Delhi.

7. Mankar and Sarma, *Public Finance-Theory and Practice*, Himalaya Publishing House, New Delhi.
8. S.K.Singh, *Public Finance in Theory and Practice*, S.Chand & Company Ltd, New Delhi.
9. Ahuja, H.L., *Modern Economics*, S.Chand&Company Ltd, New Delhi.
10. Dewtt, K.K, *Modern Economic Theory*, S.Chand & Company Ltd, New Delhi.
11. Datt, Ruddra and K.P.M. Sundaram (Current Edition) *Indian Economy*, S.Chand & Co., New Delhi.
12. Misra and Puri (Current Edn) *Indian Economy*, Himalaya Publishing House, New Delhi.

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History of Economic Thought

I - M.A(Economics) / I - Semester

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History of Economic Thought

Module-I: Pre-Classical Economy

Why study the history of economics? – Nature and Scope of Economic Thought – Mercantilism: Economic Theories and Policies – Physiocracy: Natural Order, Agriculture and Product net, Social Classes.

Module-II: Classical Economy

Adam Smith: The Causes of the Wealth of Nations, Theory of Value, Laissez-faire – Karl Marx: Dynamics of social change. – Thomas Robert Malthus: Theory of Population – J.B. Say: Law & Market

Module-III: The Marginalist School

W. S. Jevons: Theory of value – Carl Menger: Theory of Goods – Leon Walras: Marginal Theory of Value and General Equilibrium Theory – Alfred Marshall: Principles of Economics

Module-IV: Indian Economic Thought

Early economic ideas: Kautilya- Modern economic ideas: Naoroji and Ranade; Dr. B.R. Ambedkar's Economic ideas.

Reading List

1. Erice Roll, A History of Economic Thought, Faber and Faber Ltd. London, 1992.
2. Steven G Medema, & Warren J. Samuels, The History of Economic Thought: A Reader, Routledge, London, 2013.
3. Haney, Lewis H: History of Economic Thought (4th Edn) Macmillan, 1949.
4. Ajit Dasgupt, A History of Indian Economic Thought, Routledge, London, 1993.
5. Bhatia, H.L., History of Economic Thought, Vikas Publishing House, New Delhi, 2009.
6. Hajela, T. N., History of Economic Thought, Ane Books Pvt. Ltd., New Delhi, 2001.
7. Edmund Whittaker, A History of Economic Ideas, Longman's Green and Company, London, 1949.

8. Ghosh & Ghosh – Concise History of Economic Thought, Himalaya Publishing House, New Delhi.
9. Ganguli, B.N. (1977), Indian Economic Thought: A 19th Century Perspective, Tata McGraw Hill, New Delhi.
10. Seshadri, G.B. (1997), Economic Doctrines, B.R. Publishing Corporation, Delhi.

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Mathematical Methods in Economics

I - M.A(Economics) / I - Semester

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Mathematical Methods in Economics

Module-I: Sets and Algebra Functions

Theory of indices –Sets, - Operations on sets, – Types of Functions; Exponential, logarithmic, Polynomial and Homogenous Functions – Geometrical presentation of a Function – Limit

Module-II: Matrices and Determinants

Concept of a Matrix – Types of Matrices – Simple Operations on Matrices – Determinants and their Basic Properties – Rank of a Matrix – minors and co-factors – Inverse of a matrix – Solution of Simultaneous Equations – Cramer’s rule.

Module-III: Economics Application

Constrained optimizing - Maxima and Minima – maxima and minima two are more variables-theory of cost and revenue – concept of a firm under perfect competition – Elasticity of Demand and Supply functions - Demand relationship Between Total Revenue, Marginal Revenue, Average Revenue - Euler’s theorem.

Module-IV: Differentiation and Integration

Concept of a Derivative – Rules of Differentiation – Second order Derivatives –Partial and total differentiation Concept of Integration – basic Rules of Integration, – Consumer’s Surplus and Producer’s Surplus

Text Books

1. An introduction to Mathematical Economics - D. Bose
2. Textbook of mathematical methods in Economics post graduate Course, UGC

Reading List

1. Allen, R.G.D. (1957), *Mathematical Economics*, St. Martin’s London.
2. Allen, R.G.D. (1972), *Mathematical Analysis for Economist*, Macmillan press and ELBS, London.
3. D. Bose, *An Introduction to mathematical Economics*, (Himalaya Publishing House), Hyd.
4. Caroline Dinwiddie, *Elementary Mathematics for Economists*, Oxford University Press, Nairobi, Kenya, 1993.

5. **Taro Yamane:** *'Mathematics for Economist' (An elementary survey)*, 2nd Edition Prentice Hall Of India, New Delhi.
6. B.C. Mehatha and G.K. Madnani: *'Mathematics for Economist'*, Sultan Chand & Sons, New Delhi.
7. **D.R Agarwal:** *'Quantitative Method, (Mathematics and Statistics)*, Vrinda Publications Pvt. Ltd, New Delhi.

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Rural Development

I - M.A(Economics) / I - Semester

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Rural Development

Module-I: Nature and Scope of Rural Development

Meaning, Definition and Scope of Rural Development – Importance of Rural Development – Objectives of Rural Development – components of Rural Development – Causes of Rural Backwardness

Module-II: Approaches to Rural Development

Approaches to Rural Development: Marxian Approach – People’s Participatory Approach – Target Group Approach – Integrated Approach. Rural Development-Experiences of China, Tanzania, Bangladesh, Israel.

Module-III: Rural Industrialization and Entrepreneurship

Gandhian Approach to Rural Industrialization – Entrepreneurship and Rural Industrialization – Characteristics and Types of Entrepreneurship – Agro-based Industries – Khadi and Village Industries –Problems of Rural Industries.

Module-IV: Rural Development Programmes

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), National Rural Livelihood Mission(Deendayal Antyodaya Yojana) Pradhan Manthri Gram SadakYojana (PMGSY). National Rural Health Mission (NRHM), Micro Units Development and Refinance Agency (MUDRA),P.M.AwasYojana (PMAY),Pradhan Mantri Fasal BhimaYojana(PMFBY).– **Deen Dayal Upadhyay Grameen Kaushal Yojna (DDUGKY).**

Reading List

1. Vasant Desai, Rural Development in India, Himalaya Publishing House, Hyderabad, 2010.
2. Satya Sundaram, I., Rural Development, Himalaya Publishing House, Hyderabad, 2009.
3. Katar Singh, Rural Development: Principles, Policies and Management, Sage Publications, New Delhi, 1986.
4. Gupta & Gupta, Rural Development in India – Poverty and Development, Himalaya Publishing House, Bombay, 1988.
5. Maheshwari, R. B., Rural Development in India – A Public Policy Approach, Sage Publications, New Delhi, 1985.
6. Robert Chambers, Rural Development, Longman, London, 1983.
7. Srivastav, M and Singh, A. K., Rural Development in India, Deep & Deep Publications, New Delhi, 1988.
8. Rakesh Upadhyaya, Integrated Rural Development Programmes: A Policy Approach, Himalaya Publishing House, Bombay, 1989.
9. Tiwari, T. T. & Sinha, R. C., Rural Development and Planning in India, Deep & Deep Publications, New Delhi, 1986.
10. Dr.Shankar Chatterjee: Implementation of R.D in India-Serials publications.

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International Economics

I - M.A(Economics) / II - Semester

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Module-I: Theories of Trade

Classical theory: Adam Smith, Ricardo, Heberler, J.S. Mill – Modern Theory: Heckscher-Ohlin, Stolper-Samulson – Factor Price Equalization theorem – Rybczynski theorem

Module-II: Adjustment Mechanisms in Balance of Payments

Automatic Price Adjustment under Gold Standard–Classical Theory of Balance of Payments–The Elasticity Approach–The General Theory of Balance of Payments–The Monetary approach of Balance of Payments and Foreign Trade Multiplier Trade Policy and Theory of Trade Interventions–Gains from trade and their distribution – Concepts of terms trade their uses and limitations – secular deterioration of terms of trade –The theory of interventions –Tariff – Quotas and non-tariff barriers – Economic effects of Tariffs Vs Quotas

Module-III: Foreign Exchange Market

Meaning and Determination of Foreign Exchange Rate– Theories of Foreign Exchange Rate: The Mint Parity Theory–The Purchasing Power Parity Theory–The Balance of Payments Theory–Causes of Changes in the Exchange Rate-Exchange Rate Adjustment Policies: Fixed Exchange Rate–Flexible Exchange Rate–Adjustable Peg System–Crawling Peg System–Multiple Exchange Rate System–Spot and Forward Exchange Equilibrium

Module-IV: Global Institutions

The Bretton Woods System – IMF and World Bank – Collapse of Bretton Wood System – WTO – Issues at the recent WTO Ministerial Conferences – International Development Association (IDA) – Asian Development Bank (ADB) – South Asian Association for Regional Cooperation (SAARC) – European Union – ASEAN

Reading List

1. Bo Sodersten, Geoffrey Reed (1999), *International Economics*, Palgrave Macmillan, New Delhi.
2. J. E. Meade, *The Theory of Economic Policy* vol.1 The balance of payments.
3. Paul R. Krugman & Maurice Obstfeld: *International Economics*, Pearson Education, 2005.
4. Dornbusch, *Open Economy Macro Economy*, Basic Books, New York, 1980.
5. Caves Frankel & Jones, *World Trade & Payments: An Introduction*, Pearson Education, 2007.
6. James Gerber, *International Economics*. Pearson, 6th edition, 2013.
7. Henry Thompson, *International Economics: Global Markets and Competition*, Cambridge University Press, 2nd edition, 2009
8. Ltd., London Carbaugh, R. J, *International Economics*. 11th Edition, Thomson South Western, New Delhi, 1994.
9. Salvatore, D, *International Economics*. 8th Edition, Wiley India, New Delhi, 2000.
10. Keith Pilbeam, *International Finance*. 3rd edition, Palgrave, 2001.
11. Feenstra. R., *Advanced International Trade: Theory and Evidence*. Princeton University Press, 2009.
12. Bhagwati, J., A. Panagariya, and T. Srinivasan. *Lectures on International Trade*, 2nd edition, MIT Press, 1998

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Money and Banking

Module-I: Money and Theories of Demand for Money

Nature and definition of money- Evolution of money- Functions of money-Schools of economic thought: views on money-Demand for Money- Theories of Money: Fisher's Quantity Theory of Money- Cambridge Cash Balance Approach- Friedman's Theory- Keynes Liquidity Preference Theory of Money.

Module-II: Supply of Money and its Theories

Money Supply- Determinants of Money Supply- Measures of Money Supply- High Powered Money- Factors affecting High Powered Money- H theory of money supply- The Money Multiplier and its determinants- The Process of Credit creation- Theory of Bank Credit and Deposits- Interest Rates: Loanable Fund Theory.

Module-III: Introduction to Banking

Origin and Nature of Banking- Classification of banks: Commercial Banks- Regional Rural Banks (RRBs)-Co-operative Banks-Role and performance of Micro Finance in India- Bank Performance Measurement- Allocation of Institutional Credit as an Institutional Process- Financial and Non-financial Factors in allocation of Institutional Credit.

Module-IV: Monetary Policy and Central Banking

Central Bank–Role and Functioning of the Reserve Bank of India –Monetary Policy and its objectives – Quantitative and Qualitative instruments of Monetary Policy – Priority sector lending –Banking Ombudsman Scheme – Banking Sector Reforms – Chakravarthy Committee Report – Narasimhan Committee Report – Recent Developments on Financial Inclusion in India.

Reading List

1. Lewis M. K. and P.D.Mizen (2000): Monetary Economics, Oxford
2. Jadhav Narendra (2006): Monetary Policy, Financial Stability & Central Banking, Macmillan.
3. Baye and Jansen(1996): Money, Banking and Financial Markets, AITBS.
4. Gail E. Makinen (1978): Macroeconomics: Concepts, Theories and Policies, Money, The Price Level and Interest Rate, Prentice hall India Ltd.
5. David E.W.Laidler(1977): The Demand for Money: Theories & Evidence, Dun-Donnelley
6. O. P. Kotwal (1987): Theories of Inflation: A Critical Survey, Tata-McGraw-Hill Publishing Co. Ltd.
7. Ackley G. (1978): Macroeconomics: Theory & Policy, New York, Macmillan
8. Rana, K.C. & Verma K.N: Macro Economic Analysis, Vishal Publishing House, New Delhi.
9. Shekhar & Shekhar, (1998): Banking Theory & Practice, Vikash Publishing House Pvt.Ltd.
10. Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi

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Development Economics

I - M.A(Economics) / II - Semester

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Module-I: Concepts & Issues of Development

Economic Development and Growth – Characteristics of Developing Countries – Measurement of Economic Development – Obstacles to Economic Development – Characteristics of modern Economic Growth - Human Development Index.

Module-II: Theories of Development

Rostow's Stages of Economic Growth – Lewis' Theory of Unlimited Supplies of Labour – Rosenstein Rodan's Big Push Theory – Balanced Growth Theory - Unbalanced Growth Theory – Harvey Leibenstein's Critical Minimum Effort Thesis – Nelson's Low Level of Equilibrium Trap.

Module-III: Growth Models

Harrod-Domar Growth Model – Joan Robinson's Model of Capital Accumulation –Kaldor's Model of Growth - Solow Model Long Run Growth – Meade's Growth Model.

Module-IV: Factors and Models of Indian Economic Development

Mahalanobis Model – Vakil and P.R. Brahmananda Model- Factors of Economic Development in India – Capital Formation and Economic Development – Agriculture and Economic Development - Industry and Economic Development- Technology and Economic Development – Human Resources and Economic Development.

Reading List

1. Amartya Sen, *Development as Freedom*, OUP, New Delhi, 1999.
2. Ghatak, S., *An Introduction to Development of Economics*, Allen and Unwin, London, 1986.
3. Higgins, B., *Economic Development*, W.W. Norton, New York, 1959.
4. Kindleberger, C.P., *Economic Development*, McGraw Hill, New York, 1977.
5. Myint, H., *Economic Theory and Underdeveloped Countries*, Oxford University Press, New York, 1971.
6. Thirwal, A.P., *Economic Development*, Longman, New Delhi, 1999.
7. Solow, R.M., *Growth Theory: An Exposition*, Oxford University Press, New Delhi, 2000.
8. Michael P. Todaro and Stephen C. Smith, *Economic Development*, Pearson Education, New Delhi, 2004.
9. Ahuja, H. L., *Development Economics*, S. Chand & Company Pvt. Ltd., New Delhi, 2016.
10. Kaushik Basu, *Analytical Development Economics*, OUP, New Delhi, 1997.

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Statistical Methods in Economics

I - M.A. (Economics) / II - Semester

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Statistical Methods in Economics

Module-I: Fundamentals of Statistics

Origin, Meaning, Importance and Scope of Statistics – Collection of Data: Primary and Secondary Data- Methods of Collecting Primary Data – Sources of Secondary Data – Editing Primary and Secondary Data – Types of Classification – Frequency Distribution – Tabulation of Data: Role of Tabulation – General rules of tabulation – Type of Table - Diagrammatic and Graphic Presentation: Significance of Diagrams and Graphs.

Module-II: Measures of Central Tendency

Meaning and Objectives of Average – Requisites of a Good Average – Arithmetic Mean: Merits, Demerits and Uses – Calculation of Arithmetic Mean – Median: Merits, Demerits and Uses – Calculation of Median – Mode: Merits, Demerits and Uses – Calculation of Mode – Geometric Mean: Merits, Demerits and Uses – Calculation of Geometric Mean – Harmonic Mean: Merits, Demerits and Uses – Calculation of Harmonic Mean.

Module-III: Measures of Dispersion

Significance of Measures of Dispersion – Characteristics of a Good Measure of Dispersion – Range: Merits, Demerits and Uses of Range – Calculation of Range – Quartile Deviation: Merits, Demerits and Uses of Quartile Deviation – Calculation of Quartile Deviation - Mean Deviation: Merits, Demerits and Uses of Mean Deviation – Calculation of Mean Deviation - Standard Deviation: Merits, Demerits and Uses of Standard Deviation – Calculation of Standard Deviation – Coefficient of Variation – Variance – Lorenz Curve – Importance and measure of Skewness and Kurtosis.

Module-IV: Correlation and Regression

Definition –Types of Correlation –Methods of Correlation; Scatter diagram, Graphic Method, Karl Pearson's method, Spearman's Rank Correlation- Probable error and Standard error – Regression analysis – Method of the Least Squares –Regression Equations –Regression Lines – Standard Error of estimate –Properties of Regression coefficients.

Text books

1. Introduction to Statistical Methods - S. P. Gupta
2. Fundamentals of Statistics - D.B. Gupta

Reading List

1. Gupta, D.B: *Fundamentals of Statistics*, Himalaya Publications, Hyderabad.
2. Gupta, S.P: *Introduction to Statistical Methods*, Sultan Chand and Sons, New Delhi.
3. Gupta, S.B: *Fundamentals of Statistics*, Himalaya Publications, Hyderabad.
4. John E.Freund: *Mathematical Statistics*, Prentice-Hall of India Pvt. Ltd, New Delhi.
5. Medhi, J: *Statistical Methods – An Introductory Text*, New Age International (P) Ltd. New Delhi.
6. Gupta, S.C: *Fundamentals of Statistics*, Himalaya Publications, Hyderabad.
7. Gupta, S.C, &Kapoor, V.K: *Fundamentals of Mathematical Statistics*, Sultan Chand and Sons, New Delhi.
8. Arora P.N, Arora .S, and AroraSumeet, *Comprehensive Statistical Methods*, S. Chand & Co., New Delhi.
9. Hary Frank &Steven,C, Althoen; *‘Statistics- Concepts and Applications*, CUP, Camebridge.

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Indian Financial System

I - M.A. (Economics) / II - Semester

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Indian Financial System

Unit-I: Nature and Role of Financial System

Definition and Meaning of the Financial System – Components of the financial System: Institutions, Instruments, Markets, and Services – Functions and Role of financial system – Financial System and Economic Development

Unit-II: Money Market

Structure of Indian Money Market: Call Money Market – Treasury Bills Market – Commercial Bills Market – Commercial Papers – Certificate of Deposits, Recent Development in Indian Money Market.

Unit-III: Capital Market

Capital Market: Structure of the Indian Capital Market – Derivative Markets: Futures and Options - equity shares- preference shares-debentures – convertible and non-convertible – zero interest debentures- Functions of the Stock Market- Listing of Securities - Stock Market Index - Stock Exchanges in India. – NSE-BSE.

Unit-IV: Financial Regulator

Reserve Bank of India (RBI)-Stock Exchange Board of India (SEBI)-Insurance Regulatory Development Authority (IRDA)-Pension Fund Regulatory & Development Authority (PFRDA)

Suggested Books

1. Khan, M. Y. . Indian Financial System. Tata McGraw Hill, New Delhi.
2. Machiraju, M. R. (1999), Indian Financial System. Vikas Publishing House, New Delhi
3. Kohn, Meir. Financial Institutions and Markets. Tata McGraw Hill & Co., New Delhi
4. Economic Surveys, Ministry of Finance, GOI, New Delhi.
5. Bhole, L. M. (2002), Financial Institutions and Markets. Tata McGraw Hill & Co., New Delhi.
6. Miskin, F. (2003), The Economics of Money: Banking and Financial Markets, Wesley.
7. Report on Financial Sector Reforms (2001), Tax Foundation of India, New Delhi.
8. RBI Bulletins - Various Issues.
9. Reddy. Y. V. (2001), Monetary and Financial Sector Reforms in India. UBS Publishers and Distributors Ltd., New Delhi.
10. Desai, V. (1997), The Indian financial System, Himalaya Publishing House, Mumbai.

Indian Financial System

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Fundamentals of Economics

I - M.A(Economics) / II - Semester

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Fundamentals of Economics

Module-I: Introduction

Origin and Meaning of Economics-Concepts of Economics – Definitions of Economics: Adam Smith, Alfred Marshall, Lionel Robbins, Paul Samuelson and Jacob Viner – Scope and Subject matter of Micro and Macro Economics

Module-II: Economic Systems

Meaning: Capitalist or Free enterprise Economy-Socialist Economy and Mixed Economy – Characteristics of Under developing and Developed Countries – Human Development Index – Gender Development Index – Contribution of Education and Health to Economic Growth and Development

Module-III: National Income

National Income: Meaning, Definitions: National Income, GNP & NNP, GDP & NDP, Personal Income (PI), Disposable Income (DI), Per Capita Income (PCI), Real National Income (RNI) – Methods of Estimation of National Income (NI) – Importance of National Income and problems in estimation of National Income three methods of measuring national income; constituents of national income in its three phases, viz., Production, Income and Expenditure;

Module-IV: Public Finance

Meaning, Importance and Scope of Public Finance – Sources of Public Revenue: Direct and Indirect Taxes – Finance Commission in India – Recommendations of 15th Finance Commission – Budget – Types of Budgets – Analysis of the Union Budget (Latest) – Trends in Revenue and Expenditures of the Government of India – Types Deficit Budget – Causes and Problems of Deficit Budget

Reading List

1. Ahuja, H.L. (2000), *Advanced Economic Theory: Micro Economic Analysis*, S.Chand&Company Ltd, New Delhi.
2. Archibald G.C. (Ed.), (1971), *Theory of the Firm*, Penguin, Harmondsworth.
3. Baumol, W.J. (1982), *Economic Theory and Operations Analysis*, Prentice Hal of India, New Delhi.
4. M.L.Jhinghan, *Micro economic theory*, Vrinda publications, New Delhi.
5. Tyagi, B.P., *Public Finance*, Jai PrakashNath Publications, Meerut, U.P.
6. Ahuja, H.L., *Modern Economics*, S.Chand&Company Ltd, New Delhi.
7. Dewtt, K.K., *Modern Economic Theory*, S.Chand& Company Ltd, New Delhi.
8. Sundaram, K.P.M and Andley, K.K, *Public Finance (Theory and Practice)*, S.Chand & Company Ltd, New Delhi.
9. Bramhananda, P.R. and V.R.Panchamucki (Eds) (1987) *The Development Process of Indian Economy* – Himalaya Publishing House, New Delhi.
10. Economic Survey (Annual Report), Ministry of Finance, GOI, New Delhi.

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