

Module 4: Concept of Probability- Classical and Empirical Definitions of Probability, Laws of Addition and Multiplication, Conditional Probability and Baye's Theorem, Mathematical Expectation, Binomial, Poisson and Normal Distributions- Its Concept, Mean and Variance, Properties of Normal Distribution.

Module 5: Concept of an Estimator and Its Sampling Distribution, Desirable Properties of a Good Estimator, Formulation of Statistical Hypotheses – Null and Alternative, Types of Errors, Testing of Hypothesis- Testing for Mean of a Population from Large Sample and Testing for Difference between Means of Two Population from Large Sample, Use of Z, t, Chi - Square and F-distributions.

Module 6: Time Series Analysis, Components of Time-Series Data, Determination of Secular Trend by Moving Average and Ordinary Least Square Methods.

Note: Use of Electronic Calculator will be permitted.

BASIC RECOMMEND LIST:

1. Gupta, S.P. (2007), Statistical methods, Sultan Chand and Sons, New Delhi.
2. Nagar, A.L. and Das, R.K. (1993): Basic Statistics 2nd Edition, CBS Delhi.
3. Spiegel, M.R. (1992), Theory and Problems of Statistics, Mc Graw Hill Book Co., London.
4. Banerjee, Harnal: Business Statistics.
5. Singh, S.P., Statistics: Theory and Practice (Hindi).
6. Tufano, D.N. and Verma Tufano: Fundamentals of Statistics.
7. Mehta, G.S., Mathematics and Statistics: Pt I Economics.
8. Agarwal, D.R., Quantitative Methods.
9. Spiegel, M.R., Theory and Practice of Statistics, Schaum Series.
10. Croxon, E.F. and Collins, D.J. Applied General Statistics, Prentice Hall.

M. A. ECONOMICS
SEMESTER – III

CS - 18: Indian Economy - Issues & Policies-II

Module -E: Population and Employment Population- Growth Pattern, Implications- Rural Urban Migration- Population Policies, Trends in Employment - Unemployment, Nature and Policies, Changing Nature of Labour Market Relations during recent years.

Module - 2: Social Aspects: Recent Trends in the State of Social Aspects, their Implications and Policies - Poverty- Inequality-Regional Imbalances, Child Labour, Gender, Caste Governance, Corruption- Environment-Natural Resources, Rights to Forests.

Module - 3: Fiscal, Financial and External Sector Issues: Fiscal Deficit, Tied and Significant- Fiscal Policies- Critical Appraisal - Central State Fiscal Relationships, Latest Finance Commission, Major Recommendations -Recent Budgets, Parallel Economy—Democratization and GST, Monetary & Fiscal Measures in India, Financial System, Banking and Insurance - Capital markets -Critical Appraisal of Monetary and Financial Sector Reforms - Financial Inclusion Structure and Direction of India's Foreign Trade- Balance of Payments, Post 90 Trends- Exchange Rate Trends & Policy.

Module - 4: Bihar Economy: Growth and Structure-Agriculture Performance, Major Challenges in Agriculture, Industrial Growth- Globalization (WTO, ASEAN) and Bihar's Adjustment, Industrial Backwardness- Policies, Service Sector, Sources of Growth- Construction, Tourism, Trade, Transport, Energy, Information Technology, Migration -Dimension & Impact, Human Resources Development-Emerging Issues, Policies for Unemployment, Environment Degradation, Fiscal crisis.

RECOMMENDED LIST

1. Mahabadi K Premi (2009), India's Changing Population Profile, National Book Trust, New Delhi.
2. Radhakrishnan R., Shovan Roy (Eds) (2005) Handbook of Poverty in India, Oxford University Press , New Delhi
3. Jantanj D, Subramanian S (2010) Poverty, Inequality and Population, Oxford University Press , New Delhi
4. Koothala Khara (2011) The Battle for Employment Unemployment, Oxford University Press , New Delhi
5. Amartya Sen (2000) Development as Freedom, Oxford University Press , New Delhi
6. Amartya Sen, Jean Drèze (2009) India - Development and participation Oxford University Press , New Delhi
7. Anand Dasgupta (2011) The Elimination of Caste, Oxford University Press , New Delhi
8. Srivastavakrishnan KC, Anishola Panda Handbook of Globalization Oxford University Press , New Delhi
9. Y 'N' Reddy (2011) Global Crisis, Recession and Upturn Recovery, Orient Blackswan, New Delhi
10. Mahabadi K Premi (2010) India as Growth in India Oxford University Press , New Delhi
11. Harvard 'A, Mahabadi K Premi (2011), Financial Access in Post Reform India, Oxford University Press , New Delhi
12. Mahabadi K Premi (Ed) (2011), Growth with Financial Stability, Oxford University Press , New Delhi

13. Mihir Rakshit (2010) Money and Finance in the Indian Economy, Oxford University Press, New Delhi
14. George K.K (1999), Limits to Kuznets Model of Development, CDS, Indiraforum
15. Surell Mann, Arjun Kocher, Arun M Kumar, Unraveling Tiger, Second Cross, DC Books, Kottayam.

M.A ECONOMICS
SEMESTER – III

CC-11: Economics of Growth & Development-II

Module I: Internal and International Migration- Urbanization- Todaro model, CES of Technique- Intermediate Technology- Embodied and Disembodied Technological Change- Capital Output Ratio -Domestic and Foreign Sources of Capital- Hicks-neutral - Duesen and Solow-Swan Models of Growth- New Endogenous Growth Theory and Macroeconomic Determinants of Growth.

Module II: Prebisch-Singer Thesis-Models of Export Led Growth- Neo-Classical Supply-Side Model- IHOF Constrained Growth Model and Vicious Circle Model, Trade Liberalization and Poverty Reduction in Developing Countries.

Module III: Cost-Benefit Analysis- Shadow Prices and Project Evaluation-Investment Criteria- Total Factor Productivity and Growth. Uses of Input-Output Analysis and Linear Programming in Development Planning.

Module IV: Models of Moore, Phelps, Prebisch, Mirr, and Robinson, Ranney model of Economic Growth, Basic Idea of Endogenous Growth model AK Model, Romer and Lucas Model.

BASIC READING LIST

1. Ray Debraj Development Economics, Oxford University Press 1999
2. Mihir M. Gerald and Rancho/Leading issues in Economic Development, Oxford University Press. (2008)
3. Thirlwall, A.- Growth and Development with special Reference to developing countries, Praeger Publishers (2009)
4. Todaro MP, Smith S.C. Economic development (9th Edition 2005), Pearson Education – Indian branch, Delhi
5. Todaro M.P. Economic development in the third World. (4th Edition 1997), Longman, Singapore.
6. Dev. M. Dasgupta, R. Inclusive growth in India-collected essays, Oxford University press, New Delhi (2010)
7. Chandan Ray, Arjun/An introduction to Development and Regional planning with special reference to India, Orient Longman Kolkata (2011)

8. Yojita Hayami and Yoshio Godo: Development Economics (2nd Edn) Oxford University Press (New Delhi)

9. Vandana Desai and Robert D Potter: The Companion to development studies-2 edn. Alhadder vinn eds, Viva books Pvt Ltd, New Delhi.

10. UNDP: Human Development Report, 2010

11. Duggals, A.K., The Political Economy of underdevelopment, CUP

12. Baran, paul A., The Political Economy of Growth, Penguin Books

13. Chakravarti, S., Alternative Approaches to the Theory of Economic growth

14. Chers, S.c and Denmark, R.A (Eds.), The Underdevelopment of Development, Sage Publication, New Delhi, 1996

15. Higgins, Benjamin, Economic Development, Central Book Depot, Allahabad

16. Meier and Baldwin, Economic Development

17. Meier, G.M., Leading issues in Economic Development 1999, OUP

18. Sen, A.K (Ed.), growth Economics, Selected Reading, Penguin

19. Ray D., Development Economics (OUP)

M. A. ECONOMICS
SEMESTER - III
CG-12: Public Economics

Module 1: Introduction: Role of State in Economic Activities – Allocation, Distribution and Stabilisation Functions, Changing Role of State in a Mixed Economy, Classical, Keynesian and Modern Approach in Public Finance-Functional Finance-Market Failure.

Module 2: Public Choice: Public choice – Private and Public Mechanism of Allocating Resources, Theory of Social Goods-Summitum-Pitfalls and Merit Goods.

Module 3: Public Policy: Stabilisation policy – Keynesian Case for Stabilisation policy, Public Debt- Principles of Public Debt, Burden of Public Debt, Management and Repayment of Debt, Budget-Balanced and Unbalanced Budget, Zero-Sum Budgeting, Performance Budgeting, Objectives & Importance of Fiscal Policy, Deficit Finance-Concept & Importance.

Module 4: Public Expenditure: The role of Public Expenditure, Wagner's Law of Increasing State Activities- Peacock Warriner Hypothesis, Principle of Maximum Social advantage – Growth and Pattern of Public Expenditure in India, Effects of Public Expenditure

Module 5: Taxation: Approaches to Taxation, Burden Approach, Ability to Pay Approach and Neutrality approach – Elasticity and Progressivity of Taxation – Incidence, Shifting, Effects and Burden of Taxation-Types and Classification of Taxes and VAT, GST, Direct Tax Code, Digitalisation and Taxation

Module 6: Fiscal Federalism: Fiscal Administration and Financial Control in India, Fiscal Federalism- Sarkaria Commission Report and Current Finance Commission, Digitalisation and Public Finance/Management System.

RECOMMENDED LIST

1. Wolfson, A.B and J.E. Slichter (1980), Lectures on Public Economics, Tata McGraw Hill,

New York.

2. Auerbach, A. J and M. Feldman (Eds.) (1985), *Handbook of Public Economics*, Vol. 1, North Holland, Amsterdam.
3. Buchanan, J.M. (1976), *The Public Finances*, Richard D-Irwin, Homewood.
4. Goode, R. (1986), *Government Finance in Developing Countries*, Tata McGraw Hill, New Delhi.
5. Houghton, J.M. (1976) *The Public Finance: Selected Readings*, Penguin, Harmondsworth.
6. Jha, R. (1998), *Modern Public Economics*, Routledge, London.
7. Mirrlees, P. (1996), *The Economics of Public Choice*, Edward Elgar, U.K.
8. Musgrave, R. A. (1977), *The Theory of Public Finance*, McGraw Hill, Kogakusha, Tokyo.
9. Musgrave, R. A. and P.H. Musgrave (1978), *Public Finance in Theory and Practice*, McGraw Hill, Kogakusha, Tokyo.
10. Shoup, C.S. (1976), *Public Finance*, Aldine, Chicago.
11. Skomal, P. (Ed.) (1981), *Tax Policy: Handbook*, Tax Division, Fiscal Affairs Department, International Monetary Fund, Washington D.C.
12. Dalton, H., *Public Finance*
13. Jha, R., *Modern Public Economics*, Routledge, London, 1998
14. Hicks, U., *Public Finance*
15. Piggot, A.C., *Public Finance*
16. Taylor, P.E., *The Economics of Public Finance*
17. Report of the Cheliah Committee
18. Report of the Kulkar Committee
19. Finance Commission Reports
20. CMIE Reports
21. Gupta, Sanjay, King, Michael, Shah, Ajay, *Verbing Convergence and the Digital Revolution in Public Finance*, IMF Publications, Washington DC, USA.

M. A. ECONOMICS
SEMESTER - IV

CC - 11, International Economics

Module 1: Theory of International Trade: Comparative Cost Theory of International Trade, Modification and Refinement of Thirlinger – Ohlin Theory of Trade, Theorem of Factor Price Equalization, Factor Reversal, Heckscher-Ohlin's Theory, Posner's Technological Gap Theory, Kuris Theory of Tradeability, The Rybczynski Theorem – Concept and Policy Implications of International Growth.

Module 2: Measurement of Gains: Measurement of Gains from Trade and their Distribution, Concepts of Terms of Trade, The Theory of Interventions.- Concept and Economic Effects of Tariffs and Quotas on National Income, Output, Employment, Terms of Trade and Non-Tariff Barriers, Subsidy Migration Theory or Prebisch - Singer Hypothesis.

Module 3: Balance of Payments: Equilibrium and Disequilibrium in the Balance of Payments- Elasticity Approach, Absorption Approach and Monetary Approach to the Theory of Balance of Payments Adjustment, Foreign Trade Multiplier, Trade Deficits, EXIM Policy

Module 4: Exchange Rate Determination: Exchange Rates, Types and Determination of Exchange Rates in Short and Long run, Hybrid Exchange Rate Policy, Managed Flexibility of Exchange Rate Policy and Exchange Rate Policy in Practice.

Module 5: Regional Blocks & International Institutions: Static & Dynamic Effects of Custom Union Functions of WTO (TRIPS, TRIMS), UNCTAD, IMF, World Bank and SAARC, Trade Reform in India: Recent Changes in the Direction and Composition of Trade and their Implications, Changing Global Scenario and Trade Barriers.

BASIC READING LIST

1. Bhagwati, J. (Ed.) (1980), *International Trade, Selected Readings*, Cambridge, University Press, Massachusetts.
2. Carbaugh, R.J. (1999), *International Economics*, International Thomson Publishing New York.
3. Chacholades, M. (1990), *International Trade: Theory and Policy*, McGraw-Hill, Kogakusha, Japan.
4. Dana, M.S. (2000), *International Economics: Study, Guide and Workbook, 1st Edition*, Routledge Publishers, London.
5. Dana, R.M. and J.H. Matti (2000), *International Economics: Knowledge, Questions*, Knolls Berger, C.P. (1975), *International Economics*, R.D. Irwin, Homewood.
6. King, P.G. (1994), *International Economics and International Economic Policy: A Textbook*, McGraw Hill International, and Singapore.
7. Krugman, P.R. and M. Obstfeld (1994), *International Economics, Theory and Policy*, Glenview, Foxman.
8. Solerston, B. *International Economics*.

M. A. ECONOMICS

SEMESTER - IV

CU - 14: Research Methodology

Module I: Introduction, Aim, Objectives, and Scope of Research in Economics, Types of Research- Quantitative Research, Methodology of Economic Research- Explanatory, Descriptive,

Analytical Quantitative and Qualitative Approaches, Historical, Experimental & Ex-Post Fact Research - Importance of Review of Literature in Research, Steps involved in Scientific Research

Module-I: Sampling and Data Collection: Collection of Primary and Secondary Data, Need of Sampling, Stratified Sampling, Multi-Stage Sampling, Systematic Sampling, Cluster Sampling, Size of Sampling, Uses of Sampling, Sampling and Non-Sampling Errors- Observation Methods, Participant and Non-Participant Methods- Case Study, Questionnaire and Interview Schedule, Projective Indirect Methods, Focus Group Study (FGDS), Rapid Appraisal Survey (RAS).

Module-II Research Problems: Steps Involved, Aims and Objectives, Identification of Research Problems, Theoretical Framework and Statement of the Problem, Review of Research, Formulation of Objectives and Hypothesis, Types of Hypothesis, Types of Errors, Defining the Quantitative Research Design, Hypothesis Testing, Report Writing- Steps and Process, APA Style of Writing References.

Module-III Computer & Its Application: MS-Word MS-Excel, Basic Elements, SPSS.

BASIC READING LIST

1. C. R. Kothari, Research Methodology, Welfare Prakash
2. A.N. Sarda and Anandji Singh, Research Methodology in Social Research, Himalaya Publishing House.
3. Wilkinson and Shankerkar, Methodology and Techniques of Social Sciences, Himalaya Publishing House.
4. G. R. Krishna Swamy and Ranganathan, Methodology of Research in Social Sciences, Himalaya Publishing House
5. Ram Anuja, Research Methods, Ravish Publications.
6. C.S.D. Guide to Official Statistics.
7. Ghosh, B.N., Scientific Methods and Social Research.
8. Tandon, D.C., Research Methodology in Social Science
9. Subramanian, N., Introduction to computers
10. Young, P.V., Scientific Social Surveys and Research (Prentice-Hall)

M. A. ECONOMICS SEMESTER - IV

EC - I (Group - A): Agricultural Economics

Module I: Agriculture and Economic Development: Nature and Scope of Agricultural and Rural Economics, Causes of Backwardness of Agriculture and Efforts and Approaches towards the Remedies, Traditional Agriculture and its Modernization, Role of Agriculture in Economic