

SYLLABUS

NORTH-EASTERN HILL UNIVERSITY
Under Graduate Economics Syllabus Under Semester System as Approved in the 98th meeting of the Academic Council, NEHU on 17-05-2017 (with effect from July 2017)

The objective of this paper is to introduce students with fundamentals of micro and macro economics at elementary level. It is common for both the students of Economics honors and elective.

Paper - I

Introductory Economic Theory

Unit - I

Consumer Behaviour: Concepts of demand and supply, price mechanism and market equilibrium. Elasticity of demand: types, determinants and methods of measurement (point, arc and total outlay methods), relationship between the price elasticity of demand and the slope of the demand curve. Indifference curve analysis of demand: basic assumptions, properties, consumer's equilibrium.

Unit - II

Production & Cost: Concepts of Production Function, Returns to a Factor, Returns To Scale, Law of Variable Proportions; Cost Curves - Short Run and Long Run; Total, Average and Marginal Revenue Curves, Relationship between AR, MR and Price Elasticity.

Unit - III

Market Structure and Factor Pricing: Perfect and Imperfect Competition Markets; Equilibrium of the Firm and Industry under Perfect Competition; Equilibrium of the Firm under Monopoly and Monopolistic Competition, Meaning and Features of Oligopoly; Ricardian and Modern Theories of Rent; Marginal Productivity Theory of Wages; Loanable Funds and Liquidity Theories of Interest; Knight's Theory of Profit.

Unit - IV

National Income: Meaning, Concepts and Their Inter-Relationship; Methods of Measuring National Income and Their Limitations; National Income Identity in a Closed Economy; Circular Flow of Income - Two, Three and Four Sector Models; Green Accounting.

Unit - V

Output and Employment: Classical theory of employment; Keynesian theory of income and employment; the principle of effective demand; consumption and saving function, investment multiplier; marginal efficiency of capital; saving and investment: ex post and ex ante (concepts only); concept of accelerator.

Suggested Readings:

- Ackley, G. (1976), *Macroeconomics: Theory and Policy*, Macmillan Publishing Co., New York.
- Koutsoyiannis, A. (1990), *Modern Microeconomics*, Macmillan, London.
- Lipsey, R. J. and K. A. Chystal (1999), *Principles of Economics (9e)*, Oxford University Press, Oxford.
- Mankiw, N.G. (2007), *Principals of Macroeconomics*, Thomson Learning Inc., New Delhi.
- Mankiw, N. G. (2007), *Economics: Principles and Applications*, Cengage Learning, New Delhi.
- Mukherjee, Sampat (1990), *Modern Economic Theory*, Wiley Eastern Ltd., New Delhi.
- Samuelson, P.A. and W.D. Nordhaus (1998), *Economics*, Tata McGraw Hill, New Delhi.
- Shapiro, E (1996), *Macroeconomic Analysis*, Galgoti Publications, New Delhi.
- Stonier, AW. and DC. Hague (1999), *A Textbook of Economic Theory*, Pearson Education, New Delhi.
- Mankiw, N.G. (2007), *Principals of Macroeconomics*, Thomson Learning inc., New Delhi.
- Mankiw, N. G. (2007), *Economics - Principles and Applications*, Cengage Learning, New Delhi.
- Samuelson, P.A. and W.D. Nordhaus (1998), *Economics*, Tata McGraw Hill, New Delhi.
- Shapiro, E (1996), *Macroeconomic Analysis*, Galgoti Publications, New Delhi.
- Branson, WH (2005), *Macroeconomic Theory and Policy*, East West Press.

Basic concepts of development economics and that of environmental economics are merged in this paper. Students will learn some development models, international aspects of economic development and issues related to economy environment interactions, control of environmental damage etc.

Paper – II

DEVELOPMENT AND ENVIRONMENTAL ECONOMICS

Unit-I

Concepts and Measurement: Economic growth and development – Factors affecting economic growth – Capital, Labour and Technology; Measurement of Development: Physical Quality of Life Index, Human Development Index; Gender Related Development Index; Population and Economic Development; Structural Change and Economic Development- Case Study: The Economy of India.

Unit-II

Theories of Economic Growth and Development: Classical theory of economic growth in General-Max's Theory of Economic Development, Harrod and Domar Models of Growth, Lewis Theory of Unlimited Supply of Labour, Theory of Unbalanced Growth, Critical Minimum-Effort Theory.

Unit-III

International Aspect of Economic Development: International trade as an engine of growth; Static and dynamic gains from trade; Myrdal theses vs. free trade; International financial institutions and economic development –WTO, IMF and World Bank (Roles and Functions); Case Study of Post Reform India and China.

Unit-IV

Environment and Ecology: Environment and Ecology linkage; Environment as a Necessity and Luxury; Population, Poverty and Environment linkage; Development & Environment Trade Off, Sustainable Development and its Indicators, Environmental Use and Environmental Disruption as an Allocation Problem.

Unit-V

Market Failure and Environment: Market Failure for Environmental Goods; Pollution as an Externality, Non-excludability and Commons (Diagrammatic Presentation); Environment as a Public Good; Pollution Control: Prevention, Control and Abatement of Pollution.

Suggested Readings:

- Bhattacharya, R.N. (ed) (2004), *Environmental Economics: An India Perspective*, OUP, New Delhi.
Kolstad, C.D. (1999), *Environmental Economics*, Oxford University Press, New Delhi.
Muthukrishnan, S. (2010), *Economics of Environment*, PHI Learning Pvt. Ltd, 3rd edn., New Delhi.
Pugel, Thomas (2008), *International Economics*, Tata Mcgraw-Hill, New Delhi.
Ray, Debraj (2012), *Development Economics*, Oxford University Press, New Delhi.
Shankar, U. (ed.) (2001), *Environmental Economics*, OUP, New Delhi.
Sodersten, Bo. (2003), *International Economics*, Macmillan Press Ltd., London.
Thirwall, A.P. (2007), *Growth and Development* (5e), Mcmillan, U.K.
Todaro, MP and SC Smith. (2009), *Economic Development*, Pearson, India.
UNDP, Human Development Reports for various years.
De, U.K. (2006): "Population, Poverty and the Problem of Natural Resource Management", Proceedings of International Conference on Human and Economic Resources, Izmir University of Economics, pp. 85-100.
Basu, K. (1984), *Less Developed Economy*, Blackwell.
Mohanty, SK (2014), *India China Bilateral Trade Relationship*, Research & Information System for Developing Countries, A RBI Study. <http://ris.org.in/sites/default/files/pdf/India%20china%20report.pdf>
Bhat, TP, Atulan Guha and Mahua Paul (2006), *INDIA AND CHINA IN WTO Building Complementarities and Competitiveness In the External Trade Sector*, Institute for Studies in Industrial Development. Available at planningcommission.nic.in/reports/serereport/ser/stdy_indch.pdf

NORTH-EASTERN HILL UNIVERSITY
Under Graduate Economics Syllabus Under Semester System as Approved by the
Academic Council, NEHU on 17-05-2017 (with effect from July 2017)

In this paper, students will be acquainted with the Indian economic features including agriculture, industry and various aspects of economic reforms. Also a specific section is devoted to the understanding of economy of North-Eastern region of India.

Paper - III

INDIAN ECONOMY

Unit - I

Features of the Indian Economy; India as a Developing Economy; Demographic Features - Population; Composition, Occupational Distribution, Population Policy; Poverty and Inequality; Unemployment; the Changing Structure of the Indian Economy; Pre- and Post-Reform Periods.

Unit - II

W Agriculture: Agriculture - Trends in Agricultural Production and Productivity; Land Reforms; Agricultural Finance and Marketing; Green Revolution; Public Distribution System; Food Security.

Unit - III

I Industry: Industry - Trends in Growth of Indian Industries; Small-Scale Industries; Role, and policy measures; FEMA; competition act; Industrial Policy Since 1991.

Unit - IV

E Economic Reforms: Economic Reforms Since 1991: Liberalization, Privatization and Globalization; External Sector: Composition and Direction of India's Foreign Trade; Trends in Exports and Imports; Balance of Payments Crisis; EXIM policy; Foreign Capital: Aid, FDI and FII, Foreign Trade Policy.

Unit - V

S Economy of North-Eastern Region: Basic Features; Trends of state GDP and Sector-Wise Contribution, Occupational Pattern; Natural Resources: Land, Water and Forest Resources; Agriculture: Cropping Pattern; Industry: Importance; Industrial policy of 1997 and 2007; Small-Scale Industries; Role of NEC; Tourism: importance, potential and challenges.

Suggested Readings:

- Alam, K. (ed) (1993), *Agricultural Development in North East India: Constraints and Concepts*, Deep & Deep Publications, New Delhi.
- Bora, S. and M.C. Bora (2005), *The Story of Tourism: An Enchanting Journey Through India's North East*, UBS Publishers & Distributors Pvt. Ltd., Delhi.
- Datt, Ruddar and K.P.M. Sundharam (2012), *Indian Economy*, S. Chand & Company Ltd., New Delhi.
- Dhingra, I.C. (2001), *The Indian Economy: Environment and Policy*, Sultan Chand & Sons, New Delhi.
- Gopalakrishnan, R. (1995), *The North East India: Land, Economy and People*, Har Anand Pub., Delhi.
- Kapila, Uma (ed) (2007), *Indian Economy - Performance and Policies*, Academic Foundation.
- Misra and Puri (2012), *Indian Economy*, Himalaya Publication, New Delhi.
- NEC, Basic Statistics of NER, Various Issues.
- De, UK and F. Kulirani (2007), *Issues on Natural Resource Management with Special Reference to North-East India*, Regency Publications, New Delhi.
- D'souza, A. and A.S. Ray (2014), "Structural Transformation in the North-Eastern Region of India: Charting out an agriculture-based development policy" Discussion Paper, Centre for International Trade & Development, JNU. http://www.jnu.ac.in/SIS/CTTD/DiscussionPapers/DP04_2014.pdf
- Sahu, P.P. (2012), "Employment Situation in North-Eastern Region of India - Recent Trends and Emerging Challenges", NLI Research Studies Series, 096/2012. <http://www.vygal.org/publication/labour-and-development-dec-2013>

NORTH-EASTERN HILL UNIVERSITY
Under Graduate Economics Syllabus Under Semester System as Approved by the
Academic Council, NEHU on 17-05-2017 (with effect from July 2017)

this paper is structured to impart knowledge on how the fiscal policies of the government affect the macro-economic objectives of allocative efficiency, distributive justice and economic stability.

Paper-VIII

PUBLIC ECONOMICS

Unit-I

Introduction to Public Economics: Public Economic Policy Issues: Allocation, Distribution and Stabilization; public goods, private goods and merit goods; Methods of Supply of Pure Public Goods, Free Riding; Externalities: the Problem and its Solutions; Market Failure.

Unit-II

Theories of Taxation: Basic Concepts, Classification of Taxes and Canons, Taxable Capacity; Welfare Cost of Taxation, Partial and General Equilibrium Analysis, Tax Incidence of taxes, Tax-Subsidy Capitalization; Recent Tax Reforms – VAT and GST.

Unit-III

Theories of Public Expenditure: Canons and Effects of Public Expenditure, Classical Theory, Principles of Maximum Social Advantage, Bowen's Model; Samuelson's Benefit Theory of Public Expenditure; Musgrave's Optimum Budget Theory, Structure and Growth of Public Expenditure with respect to India.

Unit-IV

Fiscal Policy and Fiscal Federalism: Objectives of fiscal policy; interdependence of fiscal and monetary policies; budgetary deficit and its implications; Balanced Budget Multiplier; Fiscal federalism in India; Inter-governmental Transfer; Finance Commission (latest); Devolution of resources and grants.

Unit-V

Public Debt and Budget: Sources of Public borrowing; effects of public debt; methods of debt redemption; growth of India's public debt; Budget: kinds of budget, economic and functional classification of budget, preparation and passing of budget in India.

Suggested Readings:

- Atkinson, A. B. and J.E. Stiglitz (1980), Lectures on Public Economics, Tata McGraw Hill, New York.
Auerbach, A.J. and M. Feldstein (eds.) (1985), Handbook of Public Economics, Vol. 1, North Holland Amsterdam.
Buiter, Willem H. (1990), Principles of Budgetary and Financial Policy, The MIT Press.
Ghosh, A. and G. Chandana (2008), Economics of the Public Sector, Prentice Hall of India Pvt. Ltd., New Delhi.
Government of India, Economic Survey (Annual), New Delhi.
Hyman, D. N. (2007), Public Finance: A Contemporary Application of Theory to Policy, Thomson Asia.
Jha, R. (1998), Modern Public Economics, Routledge, London.
Lipsey, R. and A. Chrystal (2011), Economics, Oxford University Press, New York.
Mishra, B. (2006), Fiscal Policy in North-East India, Akansha Publishing House, New Delhi.
Musgrave, Richard A. (1959), The Theory of Public Finance, Tata McGraw Hill, New York.
Purohit, Mahesh (2001), Value Added Tax, Gayatri Publications.
Srivastav, D. K. (ed.) (2000), Fiscal Federalism in India, Har Anand Publications Ltd., New Delhi.
Stiglitz, J. E. (1986), Economic of Public Sector, Norton, New York.
Ulbrich, H. (2004), Public Finance in Theory and Practice, Thomson Asia Pvt. Ltd., Singapore.

NORTH-EASTERN HILL UNIVERSITY
Under Graduate Economics Syllabus Under Semester System as Approved by the
Academic Council, NEHU on 17-05-2017 (with effect from July 2017)

This paper provides some knowledge on basic tools of statistics and methods in analysing various economic phenomena in terms of consumers, producers and market behaviour.

Paper – VII

STATISTICS

Unit-I

D.S. **Central Tendency and Dispersion:** Measures of Central Tendency: Mean, Median, Mode, Geometric Mean and Harmonic Mean. Measures of dispersion: Range, Mean Deviation, Standard Deviation, Coefficient of Variation, Quartile deviation, Lorenz Curve, Skewness and Kurtosis.

Unit-II

D.S. **Correlation and Regression:** Correlation: Scattered diagram; Coefficients of correlation: Karl Pearson and Rank Correlation; Simple Linear Regression: Least Squares method, Interpretation of regression coefficients (two variables only).

Unit-III

M.K. **Time Series:** Time series analysis: Concept and Components: determination of Regular trend - Moving Average and Curve Fitting.

Unit-IV

M.K. **Index Numbers:** Concept, price relative, quantity relative, value relative, Laspeyres's Index, Paasche's Index and Fisher's index. Problems in the construction and limitations of index numbers; Tests for ideal index number.

Unit-V

M.K. **Probability and Sampling:** Probability: Concept, Rules of Probability (Addition and Multiplication); Random variables, Mathematical expectations, Theoretical distributions: Binomial, Poisson and Normal – their properties and uses: Sampling: Simple, Random, Stratified, Systematic and Cluster Sampling.

Suggested Readings:

- Goon, A.M., M.K. Gupta and B. Dasgupta (2005), *Fundamentals of Statistics, Vol. I & II*, The World Press Ltd., Kolkata.
- Das, N. G. (2009), *Statistical Methods, Vol. I & II*, Tata McGraw-Hill Education, New Delhi.
- Goon, A.M., M.K. Gupta and B. Dasgupta (latest edn.), *Basic Statistics*, The World Press Ltd., Kolkata.
- Hooda, R. (2013), *Statistics for Business and Economics*, Vikas Publishing House.
- Kendall, M.G. and Stuart, Alan (2009), *The Advanced Theory of Statistics, Vol. I, II, III*, Wiley.
- Medhi, J. (2009), *Statistical Methods: An Introductory Text (2e)*, New Age International, New Delhi.
- Nagar, A.L. and R.K. Das (1997), *Basic Statistics (2e)*, Oxford University Press, New Delhi.
- Gupta, SC and VK Kapoor (2002), *Fundamentals of Mathematical Statistics*, Sultan Chand & Sons.

... on 17-05-2017 (with effect from July 2017) Semester System as Approved by the
This paper deals with the essential mathematical ideas and tools used for analysing various concepts of economic principles and relations. So it is useful for the students to learn these mathematical tools with applications in analysis of economic phenomenon.

Paper – IV

MATHEMATICS FOR ECONOMISTS

Unit-I

D.S Basic Concepts: Sets, Variables, Relations and Functions, Equations, Identities, Equilibrium condition, Systems of Simultaneous Linear Equations, Homogenous and Homothetic functions, The Straight line and its slope.

Unit-II

W.S.K Matrix and Determinants: Types of Matrices, Rules of Addition and Multiplication; Determinants: Definition and properties; Solution of Linear Equations: Matrix Inversion Method and Cramer's Rule; Leontief Static Open Model.

Unit-III

D.S Differential Calculus: Concepts of Limit and Continuity; Rules of Differentiation, Partial and Total Differentiation.

Unit-IV

D.S Optimization using Differential Calculus: Maxima and Minima (one variable); Elasticity; Equilibrium of a firm and consumer; Inter-relationships among total, marginal and average costs and revenues.

Unit-V

W.S.K Integration: Concept, Rules of Integration, Methods of Integration, Integration by parts, Definite Integrals; Consumer's and Producer's surplus.

Suggested Readings:

- Allen, R.G.D (2008), *Mathematical Analysis for Economists*, Macmillan Press, London.
Chiang, A.C. and K. Wainwright (2013), *Fundamental Methods for Mathematical Economics*, McGraw Hill, New Delhi.
Hoy, Livernois, McKenna, Rees and Stengos (2011), *Mathematics for Economics*, Mc Graw Hill.
Sydsaeter, K., P.J. Hammond and A. Strom (2014), *Essential Mathematics for Economic Analysis*, Pearson.
Taro, Yamane (2012), *Mathematics for Economists: An Elementary Survey (2e)*, Prentice Hall of India, New Delhi.

Syllabus Under Semester System as Approved by the
The paper deals with the basic international economic principles, theories and its applications to the real world situations.

Paper-VI

INTERNATIONAL ECONOMICS

Unit-I

Introduction, Basic tools and Trade theories: Nature and significance of international economics, production possibility curves, community indifference curves, offer curves, box diagrams, the law of absolute advantage, the law of comparative advantage, the Heckscher – Ohlin trade model, factor reversal and Leontief paradox.

Unit-II

Terms of trade and Gains from trade: Concepts of terms of trade, factors affecting terms of trade, theory of reciprocal demand, gains from exchange and gains from specialization, gains from trade and income distribution, the theory of immiserising growth.

Unit-III

Tariffs and Quotas: Types of tariffs and quotas, effects of tariffs under partial equilibrium and optimum tariff, effects of import quotas, Tariff-quota controversy and less developed countries with reference to India, non-tariff barriers to trade.

Unit-IV

Balance of Payments and Foreign Exchange: Problems, Adjustment Process, Absorption Approach, Foreign Trade Multiplier, Spot and Forward Rates of Exchange, Fixed and Flexible Exchange Rate, Purchasing Power Parity Theory, Current Account Convertibility of the Rupees, Move towards Capital Account Convertibility.

Unit-IV

International Macro Economic Policies: International Monetary System, Functions of IMF, World Bank and W. T. O in the Context of India; Globalization and Financial Crisis; Concept of Regional Trade Blocks – BRICS, ASEAN and Their Role in the Promotion of Trade.

Suggested Readings:

- Bhagwati, J. (ED) (1981), *International Trade*, Selected Readings, Cambridge University Press, Mass.
Carbaugh, R. J. (2004), *International Economics* (9e), Thomson South Western, Singapore.
Joshi, V. and I. M. D. Little (1998), *India's Economic Reforms*, Oxford University Press, Delhi.
Kindleberger, C. P. (1973), *International Economics*, R. D. Irwin, Homewood.
Mannur, H. G. (1997), *International Economics*, Vikas Publishing House, Pvt. Ltd.
Panchamukhi, V. R. (1978), *Trade Policies of India: A Quantitative Analysis*, Concept Publishing Company, New Delhi.
Salvatore, D. L. (1997), *International Economics*, Prentice Hall, Upper Saddle River, N. J.
Singh, M. (1994), *Indian Export Trends and Prospects for Self-sustained Growth*, Oxford University Press, Oxford.
Sodersten, Bo (1991), *International Economics*, Macmillan Press Ltd., London.
Cherunilam, F. (2008), *International Economics*, 5th Edn., Tata McGraw Hill Education.
Salvatore, D. (2014), *International Economics- Trade and Finance*, 11th Edn. Paperback, Wiley.
Stiglitz, J. (2016), *Globalisation and Its Discontents*, Arihant, Ebook.
Krugman, P. (2014, 10th Edn), *International Economics- Theory & Policy*, McGraw Hill.
Mohanty, SK (2014), *India China Bilateral Trade Relationship*, Research & Information System for Developing Countries, A RBI Study.

After introducing with the elementary economics in Paper-I, this paper provides some in-depth understanding of Micro and Macro-economic concepts, which are essential for the students of Economics Honours only.

Paper - V

ADVANCED ECONOMIC THEORY

Unit - I

Consumer Theory: Price effect and income effect; decomposition of price effect (Hicks and Slutsky); compensated demand curves; Lancaster's Theory of Consumer's Demand for Attributes; concepts of consumer's surplus and Engel's curve; Revealed preference theory. W.R.

Unit - II

Theory of Production: Concept and properties of Cobb-Douglas and CES production functions; isoquants and isocost lines, producer's equilibrium; elasticity of factor substitution and expansion path; Economies of Scale; Concept of producer's surplus. SK

Unit - III

Market Structure and Welfare Economics: Price discrimination under monopoly, meaning of monopoly power, Chamberlin's model of monopolistic competition; Oligopoly: Cournot's model and kinked demand curve theory. Classical welfare economics; Pareto optimality; Compensation criterion; and social welfare function. SK

Unit - IV

Money, Banking and Inflation. Demand for money (Classical and Keynesian); supply of money - Fisher and Cambridge equations; high powered money: definition and concept; commercial banks: functions and credit creation; central bank: functions and instruments of credit control; inflation: meaning, types, causes, effects and control. W.R.

Unit - V

Trade Cycle: Concept, nature and characteristics; Hawtrey's monetary theory, Hayek's over-investment theory, Keynes' view on trade cycle; control of trade cycle; Balance of Trade and Balance of Payments: concepts and components, equilibrium and disequilibrium in the BOP; consequences of disequilibrium and measures to correct the deficit in the BOP.

Suggested Readings:

- Silberberg, E. & W. Suen (2001), *The Structure of Economics: A Mathematical Analysis*, 3rd Edn., McGraw Hill.
- Baumol, W.J. (1977), *Economic Theory and Operation Analysis* (3e), Prentice Hall of India, New Delhi.
- Gupta, S.B. (1994), *Monetary Economics*, S. Chand and Company, Delhi.
- Henderson, J.M. and R. E. Quandt (1980), *Microeconomic Theory: A Mathematical Approach*, McGraw Hill, New Delhi.
- Koutsoyiannis, A. (1990), *Modern Microeconomics*, Macmillan, London.
- Jingan, M.L. (2007), *Monetary Economics*, Vrinda Publications, New Delhi.
- Lipsey, R. I. and K. A. Chrystal (1999), *Principles of Economics* (9e), Oxford University Press, Oxford.
- Mankiw, N.G. (2007), *Principals of Macroeconomics*, Thomson Learning Inc., New Delhi.
- Marshaw, N. G. (2007), *Economics - Principles and Applications*, Cengage Learning, New Delhi.
- Mukherjee, Sampat (1990), *Modern Economic Theory*, Wiley Eastern Ltd., New Delhi.
- Samuelson, P.A. and W.D. Nordhaus (1998), *Economics*, Tata McGraw Hill, New Delhi.
- Shapiro, E. (1996), *Macroeconomic Analysis*, Galgot Publications, New Delhi.
- Branson, W.H. (2005), *Macroeconomic Theory and Policy*, East West Press.