M.A. IV SEMESTER

HCT4.1: INDIAN PUBLIC FINANCE - II

Preamble: This course provides a detailed analysis of Indian public finance, focusing on fiscal federalism, revenue sources, public expenditure, fiscal policy, and financial administration. It examines central and state financial relations, tax reforms, public debt, and budgeting processes. Students gain a comprehensive understanding of India's fiscal structure, policy interactions, and budgetary framework.

Module- I: Indian Fiscal Federalism.

Vertical and Horizontal Imbalances; Inter-governmental Grants; Fiscal Federalism in India: Constitutional Provisions; Assignment of Functions; Finance Commissions - Criteria for Transfer of Resources and NITI Ayoga; Centre-State Financial Relations in India; Problems of States Resources and Indebtedness.

Module- II: Revenue sources of Central Govt. and Indian Tax System

Sources of Central Government tax revenue: Direct taxes - Indirect taxes. Trends of the revenue of the government of the India. Major Taxes in India; Reforms in Direct and Indirect Taxes, Task Force on Implementation of FRBM Act, GST and its Implications. Fiscal Sector Reforms in India.

Module- III: Public Expenditure and Public Debt of India

Expenditure on Revenue Account and its components- Capital Account and its Components, trends of public expenditure of central - development and non-development expenditure- Plan and non-plan expenditure- Debt servicing charges, subsides and grants- Fiscal Deficits and Fiscal Reforms- Trends in public debt and Fiscal Reforms- Trends in public debt

Module- IV: Fiscal Policy Analysis

FSA - Identify main fiscal challenges, Interaction between monetary and fiscal policy. Fiscal policy and inclusive growth: Fiscal policy and long run growth, Fiscal policy and inequality. Fiscal space: optimal and safe debt levels, interest rates. Measuring the fiscal stance: Output gap, cyclically-adjusted (CA) and structural balance, Fiscal elasticity's and fiscal stance.

Module- V: Financial Administration and Indian Budget

Principal of Financial Administration-Financial Administration in India-Budgetary procedure: preparation of budget and its secrecy- presentation and passage of the budget- execution of the budget and parliamentary control- comments on recent central government budget.

Course Outcomes:

After the completion of the course, students shall be in a position to:

- Explain fiscal federalism and issues in inter-governmental financial relations.
- Identify central government revenue sources and major tax reforms.
- Analyze trends in public expenditure and debt in India.
- Assess fiscal policy's impact on growth, inequality, and debt management.
- Understand the Indian budget process and financial administration principles.

- 1. Bhatia H. L (1996), Public Finance, (19th Ed), Vikas Publishing House, New Delhi.
- 2. Jha, Raghavendra (1998), Modern Theory of Public Finance, Wiley Eastern Ltd., New Delhi.
- 3. Lekhi, R. K. (2000), Public Finance, Kalyani Publishers, New Delhi.
- 4. Mithani, D.M. (2006), Principles of Public Finance and Fiscal Policy, Himalaya Publishing House, New Delhi.
- 5. Srivastava, D. K. (2005), Issues in Indian Public Finance, New Century Publication, New Delhi.
- 6. Sundaram, K. P. M. and K. K. Andley (2003), Public Finance- Theory and Practice, S.Chand and Co. Ltd., New Delhi.
- 7. Tyagi, B. P. (2008), Public Finance, Jai Prakash Nath and Co., Meerut.

HCT 4.2:INTERNATIONAL TRADE &FINANCE-II

Preamble:

Thepaperaimsatpreparingthestudentsabouttherelevanceandlimitationsofinternational Economics and lay stress on to examine the impact of the trade policies.

Module- I: Balance of Payments

Balance of Payments-Concepts and Accounting Principles -Disequilibrium in International Transactions- Causes - Measures for Correcting Disequilibrium, Foreign Trade Multiplier, Alternative Approaches to the Balance of Payments Policy, Marshall-Lerner condition, Changing and Expenditure Switching Policies.

Module-II: Foreign Exchange Markets

Role of Foreign Capital in Economic Development, Structure and Function of Foreign Exchange Market - Exchange Rates Determination - Arbitrage - Spot and Forward Rates- Foreign Exchange Risks - Hedging- Speculation, Foreign Currency Swaps, Futures, Devaluation and Depreciation of Currencies, Optimum Currency Areas, International Liquidity Crisis.

Module- III: Exchange Rate Determination

Mint parity theory, Purchasing Power Parity Theory, Exchange rate dynamics, Balance of payment adjustments with exchange rate changes, the J Curve Effect. Exchange control-objectives, procedure, methods and effects of exchange control. - International money market IMF Exchange Rate Policy Co-Ordination.

Module– IV: Trade Organizations

Genesis of GATT- GATT Rounds, Emergence of the WTO, Ministerial Conferences and Issues related to GATS, TRIPS, TRIMS; IMF, IBRD, IFC, EFTA, SAARC, GCC and NAFTA and Role of G8, G20 and BRIC, Policy implications with reference to India. International Banking, Global Financial Centres.

Module- V: International Monetary System

International Monetary System – International Liquidity and Special Drawing, Need, adequacy and determinants of international reserves - Eurocurrency Markets – GDRs – ADRs – FIIs-International Financial Institutions - -The Bretton Woods System; The Gold Exchange Standard;

Course Outcomes

- Financial integration are given special focus, highlighting the role of foreign capital and of direct investment. It takes up monetary aspects of international transactions as a counterpart of real trade transactions.
- Problems of exchange rate, balance of payments and their repercussions on the functioning of the trading countries are given due importance highlighting the required adjustments in the domestic policies.
- Further developments in international monetary system and related issues are also discussed.

- 1. FrancisCherunilam(2008)- InternationalEconomics, McGraw-HillEducation.
- 2. K.CRanaand K.NVerma(2012)-InternationalEconomics, VishalpublishingCo.
- 3. Kene P.B. (1994), *The International Economy*, Cambridge University, UniversityPress London
- 4. Kindleberger C.P. (1998), International Economics, R.DIrwin Homewood.
- 5. KingP.G(1995), *InternationalEconomics and InternationalEconomicPolicy*, AReader McGraw Hill, Singapore,
- 6. Krugman P.R and M Obstifeld (2017), *International Economics- Theory and Policy*(Low Priced Edition, 5th Edition), Addison Wesley Longman (Singapore) Pte. Ltd.Indian Branch, 482 FIE, Patpargani, Delhi-110 092
- 7. Mannur, HG, (2011), International Economics, Vikas Publishing House, New Delhi.
- 8. Salvatore D (2016), *International Economics*, Prentice Hall Upper Saddle River N.J.New York
- 9. Soderstion.B.O.(1991), International Economics, The Macmillan Press Ltd. London

HCT 4.3: ENVIRONMENTAL ECONOMICS

Preamble: Environmental issues are becoming important in policy making and assessing the welfare of the societies. The application of economic tools and principles to environmental issues has gained lot of significance. Against this background, the paper aims at equipping the learner with suitable tools and techniques to analyze environmental problems, dissect their cause, evaluate the monetary consequence of policy intervention and suggest a suitable corrective action for the maximization of the outcome, ultimately leading to attainment of sustainable development.

Module-I: Elements of Economics of Environment

Meaning, Nature and Scope of Environmental Economics; Elements of Ecology; Interactionbetween Ecological and Economic Systems; Environment-Development-Poverty Nexus; Sustainable Development-Concept and Operationalisation

Module-II: Economics of Natural Resource Use

Resource Taxonomy; Economics of Exhaustible Resources- Scarcity Rents, Hotelling's Theory of Optimum Depletion and Recent Developments; Economics of Renewable Resources; Resource Scarcity as Limits to Growth; Pricing of Resources; Energy and Economic Development; Loss of Bio-diversity

Module-III: Environmental Regulation

Market Failures - Externalities - Meaning and Types - Divergence between Social Cost and Private Cost - Market Failure - Internalization of Externalities - Pigouvian Solution - Coase's Theorem and Its Critique - Property Rights Collective Action — Public Goods and Externalities - Free Rider Problem - Tragedy of the Commons; Theory of Environmental Regulation - Commandand Control Versus Market Based Instruments, Standards, Quotas, Tradable Permits

Module-IV: Environmental Pollution and Management

Extent, Causes and Consequences of Degradation of Land, Water, Forests and Air; CommonProperty Resources – Contributions and Management; Pollution Abatement; ClimateChange-Extent, Impact, Adjustment and Mitigation; Issues in International Trade andEnvironment;People's participation in management of natural resources (water and trees);EnvironmentalRegulation System in India- Design, Monitoring andEnforcement; Environmental Ethics.

Module-V: Valuation of Environment

Use values; Option values and non-use values; Valuation methods-Methods based on observed market behaviour; Hedonic property values and household production models (travel cost method and household health production function), Methods based on response to hypothetical markets, contingent valuation methods; Environmental Impact Assessment; Integrated Economic and Environmental Accounting.

Course Outcomes:

After the completion of the course, students shall be in a position to:

- Explain the scope and fundamentals of environmental economics.
- Analyse resource use theories and their economic implications.
- Evaluate market failures and solutions for environmental regulation.
- Identify causes and management strategies for environmental degradation.
- Apply valuation methods for environmental resources and impacts.

- 1. Barry C. Field, Martha K. Field. (2013): *Environmental Economics An Introduction*, TheMcGraw-Hill Co., New York.
- 2. Baumol, W.J. and W.E. Oates (1998): *The Theory of EnvironmentalPolicy*, Cambridge University Press, Cambridge.
- 3. Bhattacharya, R. N. (Ed.) (2001): *Environmental Economics: An Indian Perspective*, OxfordUniversity Press, New Delhi.
- 4. Chopra, Kanachan and C. H. Hanamantha Rao (2007): *Growth, Equity, Environment and Population*, Sage Publications, New Delhi.
- 5. Daly, H.E. (1999): *Ecological Economics and Ecology of Economics: Essay and Criticism*, Edward Elgar, Cheltenham, UK, Northampton, MA,USA.
- 6. Hanley, N., J. F. Shogren, White, B. (2001): *Introduction toEnvironmental Economics*, Oxford University Press, New Delhi.
- 7. Hanley, N., J. F. Shogren and B. White: *Environmental Economics*, Macmillan, New Delhi.
- 8. Hartwick, J. M and N. Olewiler (1986): *The Economics of NaturalResource Use*, Harper and Row Publishers, New York.
- 9. Karpagam, M. (2012): *Environmental Economics: An Introduction*, Sterling Publishers, New Delhi.
- 10. Kerr and Others (Eds.)(1997): *Natural Resource Economics: Theory and Applications for India*, Oxford University Press, New Delhi.
- 11. Rangarajan C. (1998): Indian Economy: Essays on Money and Finance, UBS, New Delhi.
- 12. Sen, R. K. and B. Chatterjee (2001): *Indian Economy: Agenda for 21st Century* (Essay in Honour of Prof.P.R.Brahmananda), Deep & Deep, New Delhi.
- 13. Sengupta, R. (2003): Ecology and Economics, Oxford University Press, New Delhi.
- 14. Shankar, U. (Ed.) (2001): *Environmental Economics*, (Readers in Economics) OxfordUniversity Press.
- 15. Singh, Katar and Anil Shishodia (2007): *Environmental Economics; Theory and Applications*, Sage Publications, New Delhi.
- 16. Sinha, Udai Prakash (2007): *Economics of Social Sector and Environment*, Concept Publishing Company, New Delhi.
- 17. Tietenberg, T, Lynne Lewis. (2016): *Environmental and NaturalResource Economics*, 10th Edition, Pearson Education House, London.
- 18. World Bank (1992): World Development Report, 1992: Environment and Development, Oxford University Press, New Delhi.
- 19. Refer Latest Reports and Publications on the Environmental Economics.

SCT 4.1 (A) ADVANCED ECONOMETRICS

Preamble: The Advanced Econometrics course deepens students' understanding of econometric techniques by covering simultaneous equation models, qualitative dependent variable models, time series econometrics, panel data models, and empirical analysis. This course equips students with the skills to handle complex econometric scenarios and apply these models to real-world economic data for robust analysis.

Module-I: Simultaneous Equation Models

Nature - Simultaneous Equation Bias - Identification: Under - Exact - Over Identification - Rules of Identification - Order and Rank Condition of Identification - Estimation of Simultaneous Equations Models: ILS, 2SLS, 3SLS.

Module-II: Qualitative Dependent Variable Models

Nature of Qualitative Variables - Linear Probability Model - Logit Model - Probit Model - Tobit Model for Grouped and Ungrouped Data - Applications of these models in Economics.

Module-III: Time Series Econometrics

Introduction - Stationary and Non-Stationary Series - Random Walk Model - Testing of UnitRoot-Co-integration - Test for Co-integration - Engel-Granger Test: Johansen Test - ErrorCorrection Model - ARCH and GARCH Modelling - Their Application in Economics

Module-IV: Panel Data Models

Why Panel Data? - Estimation - Fixed Effects Method - All Coefficient Constant across Timeand Individuals - Slope Coefficients Constant but Intercept Varies across Individuals - SlopeCoefficients Constant but Intercept Varies Over Individuals as Well as Time - All CoefficientsVary Across Individuals - Random Effects Method - Fixed Effects v/s Random Effects Model—Hausman Test - Their Application in Economics.

Module-V: Empirical Demand, Production and Investment Analysis

Static Single Equations - Demand Analysis - Theoretical Foundations of Demand Analysis-Utility Theory - Tobin's Study- Static Multiple Equations - Production Function - NeoclassicalProduction Function - Cobb-Douglas Production Function - CES Production Function -Dynamic Single Equation Model - Investment Behaviour Models and their applications.

Course Outcomes:

After the completion of the course, Students shall be in a position to

- Analyse and estimate simultaneous equation models
- Apply qualitative dependent variable models in economic research.
- Understand and implement time series econometrics, including unit root testing and error correction models.
- Utilize panel data models and apply the Hausman test.
- Conduct empirical demand, production, and investment analysis using advanced econometric models.

- 1. Damodar N Gujarati, Basic Econometrics, McGraw Hill, International Student Edition.
- 2. Damodar N Gujarati, Econometrics by Example, Palgrave Macmillan, United Kingdom.
- 3. Ghosh Sukesh K, Econometrics- Theory and Applications, Prentice Hall Private Ltd.,
- 4. New Delhi.
- 5. Koutsoyiannis A., Theory of Econometrics, The Macmillan Press Ltd

SCT 4.2 (B) HEALTH ECONOMICS

Preamble: The main aim of the paper is to enable a student to teach basic economic issues and aspects of health economics and to know about health cost, efficiency and health care system.

Module- I: Introduction to Health Economics

Definition and Dimensions of Health – Morbidity – Mortality and Life Expectancy; Occupational Health Hazards; Determinants of Health –Mal-Nutrition, Demand for Health Services, Health Indicators and their Correlation with the Level of Economic Development. Infant Mortality Rate, MMR BMI, CMR,

Module- II: Economic Evaluation of Health

Need for Economic Evaluation – Theoretical bases of Economic Evaluation. Practical steps in Economic Evaluation: Cost Analysis (CA) – Cost Benefit Analysis (CBA) – Cost Effective Analysis (CEA) and Cost Utility Analysis (CUA); Issues in the Measurement of Costs– Hospital cost inflation; Measuring Benefits in Economic Evaluation -Problems of Public Health.Economic Reforms and Health Sector

Module- III: Health Care Markets

Contracting – Transaction Cost – Health Sector contracting. Laissez-faire approach to healthcare industry, Market Structures – Imperfect Competition – Provider Competition in Health Care – Monopoly – Oligopoly and Contestability-Public and Private Health Infrastructures-Hospital and Health provider Behavior and Motivation – Regulation in Health Sector.

Module- IV: India's Health Care System

Health Care System – Environmental Pollution and Health - Drinking water and Health-Public and Private Health Systems; Health Care Delivery in India – Health Care Financing – Trends in Public Expenditure; Social Security schemes. Health Sector Reforms – Private – Public Mix–User Fees, NFHS-

Module-V: India's Health Sector

Health Sector Under Five Year Plans - National Health Policy - Emerging Health Insurance Market - Trends in Public Expenditure on Health and Family Welfare - Globalization and Health Sector - Commercialization of Health Sector in India - Health Insurance.

Course Outcomes:

- Health services constitute one of the major components of the social infrastructure. They are provided under different organizational structures.
- The health service providers are, in general, non-profit organizations and hence the traditional theory of the firm is not applicable
- Health insurance and other forms of financing also become relevant. In particularly

- 1. Alistari McGuire, John Henderson and Gavin Money (1998) Economics of Health Care: An Introductory Text, Routledge and Kegan Paul, New York.
- 2. David Daren (1975) National Health Insurance: Benefits, Costs and Consequences, Brookings Institutions.
- 3. Pearce D and P Dasgupta (1982) Social Benefit Cost Analysis, Macmilan, London.
- 4. William Jack (1999) Principles of Health Economics for Developing countries, WBI Development Studies, The World Bank, Washington, D.C.
- 5. World Bank (2002) David H. Peters, et. al. Better Health Systems for India's Poor: Findings, Analysis and Options, Human Development Network, Health, Nutrition and Population Series (The World Bank, Washington.
- 6. Weisman J, (1961) Economics of Public Health, University of Pennsylvama, Pennsylvama.
- 7. World Bank, The Financing of Health Services in Developing Countries-An Agenda for Reform, World Bank Policy Study, Washington D.C.
- 8. World Bank, (1994) Investing in People: The Health Sector, World Bank, Washington, D.C