

**Paper-14 (B-2) : Economics of Infrastructure**

**Unit-I : Introduction**

Infrastructure and economic development – Infrastructure as a public good; Social and physical infrastructure; Special characteristics of public utilities. The peak-load, Off-Load Problem, Dual Principle Controversy; Economies of scale of Joint supply; Marginal Cost Pricing vs. other methods of pricing in public utilities; Cross-subsidization – free prices, equity and efficiency.

**Unit-II : Transport and Communication**

Transport costs and Location of economic activities. Demand for transport – cost functions in the transport sector – principle of pricing – special problems of individuals modes of transport – Indian situation. Rate making in telephone utilities – principles of decreasing costs in telephone industry – Characteristics of postal services – Criteria for fixation of postal rates – Measurement of standards of services in telephone and postal utilities.

**Unit-III : Energy**

Energy and economic development – determinants of demand for energy – effects of energy shortages – energy conservation – sources of energy – optimal energy policy in the Indian context.

Pricing of electricity – Relative economics of Thermal, Hydel and Nuclear power plants – the case for a National Power Grid – Exploitation of Natural Gas – Pricing problem.

**Unit-IV : Education**

Education and Economic Growth. Approaches to Educational Planning. Social Demand. Rate of Return and Manpower Balance Approaches. The Case for Universal, Free, Primary Education; Structure of higher education and problems of its financing in India; Human Resources and Human Capital Development. The issues in education policy.

**Unit-V : Health**

Health dimensions of development; Determinants of Health – poverty, malnutrition, illiteracy and lack of information; Economic dimensions of health care – Demand and supply of health care; Financing of health care and resource constraints; Inequalities in health – class and gender perspectives; Institutional issues in health care delivery.

## Basic Reading List

1. Crew, M.A. and P.R. Kleindorfer (1979), Public Utility Economics, Macmillan, London.
2. National Council of Applied Economic Research (NCAER) (1996), India Infrastructure Report : Policy Implications for Growth and Welfare, NCAER, New Delhi.
3. Parikh, K.S. (Ed.) (1999), India Development Report – 1999-2000, Oxford, New Delhi.
4. Munby, D. (ed.) (1968), Transport: Selected Readings, Penguin, Harmondsworth.
5. Government of India (1968), Interim Report of P & T Enquiry Committee, Government of India, New Delhi.
6. Jha, R., M.N. Murthy and S. Paul (1990), On Fixing Prices for Postal Services in India, National Institute of Public Finance and Policy, New Delhi.
7. Parikh, J. (Ed.) (1997), Energy Models for 2000 and Beyond, Tata McGraw-Hill, New Delhi.
8. Becker, G.S. (1974), Human Capital (2<sup>nd</sup> Edition), National Bureau of Economic Research, New York.
9. Panchamukhi, P.R. (1980), Economics of Health: A Trend Report in ICSSR, A Survey of Research in Economics, Vol.VI, Infrastructure, Allied, Delhi.
10. World Bank (1993), The World Development Report, 1993 : Investing in Health, Oxford University Press, New York.