B.COM
SEMESTER IV
ECONOMICS OF RESOURCES
(Marks 100 – 75 Lectures)

Objectives of the Course: to familiarize the student with concepts and issues in the realm of environmental economics and sustainable development; to introduce the student to the economics of resources and their use against the background of growing global concerns over the future of the world economy due to the rapid depletion of natural resources; to introduce the student to the economics of human resource development; to help the student understand the significance of the management of environment and resources for business

Unit 1: Economics of the Environment (30 marks 16-17 lectures)
Environmental Economics – definition and meaning; linkages between economy & environment; relevance of environmental economics for business; Trade-off between conventional economic output and environmental quality (what is the trade-off, why it occurs, what can be done)

Economic efficiency & markets - meaning of economic efficiency and social efficiency; relation between markets and economic & social efficiency; external costs; private and social cost; external benefits; externalities and market failure; over-use of open-access resources

The market approach to environmental problems - internalization of external cost, pollution charges, environmental subsidies, carbon credits (meaning of each, how they work through the market mechanism)

Environmental Impact Assessment (EIA) of projects - meaning, benefits
Unit 2: Economics of Resources (10 marks 6-8 lectures)
Definition of resource; classification – natural, human, manmade; natural – renewable & non-renewable – meaning and importance of each

Economic development and resource use – optimist and pessimist models – their major conclusions

Sustainable development – definition and meaning

Unit 3: Economics of Energy and Water (30 marks 16-17 lectures)

Economics of energy: Meaning of energy; Energy and economic growth – criticality of energy as a resource, energy security, dependence on imports, inflation; Energy availability at the global and national levels – demand-supply gaps, implications, measures to reduce the gap; energy pricing in India; energy audit – meaning, importance; current energy scenario in India (including non-conventional /renewable energy)

Economics of Water: Economic importance of water; Demand for water – domestic and commercial (industry, agriculture); Global water scarcity; Water scarcity in India – extent, causes, attempted solutions; Pricing of water -

importance, water pricing in India; Challenges in the water sector – scarcity, sharing of water, pollution, groundwater issues, pricing, water quality…; National Water Policy – proposed measures to meet challenges

Unit 4: Human Resource Economics (30 marks 16-18 lectures)

Human resource development – role of education and health in human resource development

Link between education and economic growth and development (productivity, earnings, family size, family health, improved standards of living, adoption of new technology…); benefits of education - direct, indirect, private and social benefits; education as a merit good; expenditure on education in India and its composition (primary, secondary and higher education; public and private)

Link between health and economic growth and development (productivity, earnings, money saved can be spent elsewhere, savings and capital formation, better educational performance of children, smaller families…); determinants of health (income and social status, education, physical environment, health services….); health status indicators in India - birth rate, death rate, life expectancy, mortality (infant, child & maternal mortality rates), morbidity; recent trends in health status in India; economic dimension of health care - demand and supply of health care; challenges to public health in India; financing of health services – private and public expenditure on health; health insurance

Books for Study and Reference:

Barry C. Field & Martha K. Field (2002): *Environmental Economics: An Introduction*, McGraw Hill, Singapore.

Barry C. Field (2001): *Natural Resource Economics: An Introduction*, McGraw Hill, Singapore.

Bhattacharya, R.N. (2001): *Environmental Economics: An Indian Perspective*, Oxford University Press, New Delhi.

Bromley, D.W. (ed.) (1986): *Natural Resource Economics, Policy Problems and Contemporary Analysis*, Kluwer, Boston.

Dorfman, M Robert (1972): *Economics of the Environment*, W. W. Norton & Co., New York.

Dutt R. and Sundharam K.P.M. (most recent edition), *Indian Economy*, Sultan Chand and Co. New Delhi

Hanley N, J.F. Shogren & B. White (2001): *Environmental Economics in Theory and Practice*, Macmillan, London.

Hartwick, J. M. & Olewiler, N. D. (1998): *The Economics of Natural Resource Use*, 2nd ed. Harper & Row, Mass., USA

Hussen A. (2004): *Principles of Environmental Economics,* Routledge, London

Karpagam M. (2001): *Environmental Economics*, Sterling Publishers, New Delhi.

Merret S. (1997): *Introduction to the Economics of Water Resources: An International Perspective*, UCL Press

Perman, R., Ma, Y., McGilvray, J. and Common, M. (2003): *Natural Resource and Environmental Economics*, 3rd ed., Pearson Education Ltd.
Shankar, U. (ed) (2001) *Environmental Economics*, Oxford University Press, New Delhi.
Singh K. (1994): *Managing Common Pool Resources: Principles and Case Studies,* Oxford University Press, New Delhi.
Singh K. & Shishodia A. (2007) *Environmental Economics: Theory and Applications*, Sage, New Delhi

Thompson D. (2003): *The Economics of Environmental Protection*, Winthrop Publishers, Cambridge, Mass.
Tietenberg, Thomas H. (1994): *Environmental Economics & Policy*, Harper Collins, New York.
Tietenberg, Thomas H. (2006): *Environmental and Natural Resource Economics*, 7th edition, Addison-Wesley, New York.
WHO (2001): *Macroeconomics and Health: Investing in Health for Economic Development*, Report of the Commission on Macroeconomics and Health, WHO
http://www.who.int/macrohealth/action/sintesis15novingles.pdf

WHO (not known): *Health Impact Assessment*, WHO, http://www.who.int/hia/en
Winpenny J. (1994): *Managing Water as an Economic Resource*, Routledge
The Hindu: Survey of Environment, Various issues.
World Resources Institute: World Resources, Annual Reports, other publications.
Useful websites:
World Water Council: http://www.worldwatercouncil.org
Water Resources Ministry: http://wrmin.nic.in
World Health Organization: http://www.who.int