**Subject Code: P8ES11** 

# CORE COURSE - XI (CC): ENVIRONMENTAL IMPACT & ASSESSMENT

### UNIT 1

Introduction to environmental impact analysis, Environmental impact Statement and Environmental management plan. EIA guidelines 1994, notification of Government of India.

#### UNIT 2

Impact Assessment Methodologies, Generalized approach to impact analysis, Guidelines for Environmental Audit.

### UNIT 3

Base line information and prediction (land, water, atmosphere, energy, biological, cultural and socio-economic) Restoration and rehabilitation technologies, Landuse pattern ,Urban Planning and Rural planning Concept and strategies of sustainable development ,Environmental priorities in India and sustainable development. Cost benefit analysis. Environmental ethics and ecomark.

#### UNIT 4

Overview of risk assessment. Major accident in industries - causes and effects and risk to workers- risk of genetically modified organisms. Eco - epidemiology. Application of risk assessment in policy and legislation in India. Psychology of risk, economics of risk, risk financing and compensation.

## UNIT 5

Need for Environmental Education, Levels of environmental education, school children, students, rural and urban public industrial workers. Role of NGOs in environmental awareness. Introduction to GIS and Remote Sensing. Application of GIS and Remote Sensing in environmental sciences.

# REFERENCES:

- 1. Canter L.W. 1977. Environmental impact assessment .McGraw Hill Book co., New York.
- 2. Cutter, L. 1999. Environment risks and hazards. Prentice Hall of India Private Limited, New Delhi
- 3. Dalua.A.K.1993. Environmental impact of large reservoir projects on human settlement. Efficient offset printers. Delhi.
- 4. Erickson, P.A. 1977. Environmental Impact Assessment principles and Application.
- 5. Gopal, L,J. 1997. Rural Development. Mangal deep publications, Jaipur.
- 6. Masters G.M. 1991 Introduction Environmental Engineering and Science .Prentice-Hall of India Pvt. Ltd., New Delhi.
- 7. Munn, R.E. 1982 Environmental Impact Assessment. McGraw Hill Book Co., New York.
- 8. Purushotham Reddy.K and Narasimha Reddy.D.2002. Neelkamal publications Private Ltd., Hyderabad.
- 9. Rau, J.G. and Wooten, D.C. 1980. Environmental impact analysis handbook. McGraw Hill Book Co., New York.
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- 11. Trivedy, R.K. and M.PSinha. 1995. Impact of Mining an Environment. Enviro media, Karad.
- 12. Turner, R.K. Pearce D and Bateman, I .1993. Environmental Economics An Elementary Introduction .The John Hopkins University Press .Baltimore.
- 13. WHO, 1982. Rapid Assessment of Sources of Air, Water and Land Pollution. World health organization, Geneva.