

PCI7J003

ENVIRONMENTAL IMPACT ASSESSMENT

3-0-0

Module I: Overview

Concept of environmental impact, Introduction to Environmental impact assessment(EIA) definitions, terminology and concepts; Evolution of EIA, EIA at project, Regional and policy levels; Impact of development on environment and Environmental Impact Assessment (EIA) and Environmental Impact; Statement (EIS), Objectives, Historical development, EIA capability and limitations, Legal provisions on EIA.

Module II: EIA Methods

Methods of EIA, Strengths, weaknesses and applicability, Appropriate methodology, Case studies.

Module III: EIA Procedures

Socio Economic Impact, Assessment of Impact on land, water and air, energy impact; Impact on flora and fauna;Mathematical models; public participation, Reports, Exchange of Information, Post Audit, Rapid andcomprehensive EIA.

Module IV: Quantitative Methods

Use the mathematical models in EIA, Water quality, air quality and noise; assumptions and limitations. Basic tenets ofGlobal Climate Models

Module V: Infrastructure Development Projects and Impacts

Case studies, highway, airport, dams, power plans, etc, Plan for mitigation of adverse impact on environment, optionsfor mitigation of impact on water, air and land, flora and fauna; Addressing the issues related to the project affectedpeople, climate impacts and EIA

Text Books:

1. Anjaneyalu, Y. (2002), Environmental Impact Assessment Methodologies, B.S. Publications, Hyderabad.
2. Canter R.L. (1991), Environmental Impact Assessment, McGraw Hill Inc., New Delhi.
3. B. M. Noble, Introduction to Environmental Impact Assessment: A Guide to Principles and Practice. Oxford University Press, USA, 2005.
4. J. Glasson, Introduction to Environmental Impact Assesment: Principles, and Procedures, Process, Practice and Prospects (The Natural and Built Environment Series), Routledge.