

25PCEM06 ENVIRONMENTAL IMPACT ASSESSMENT (3-1-0)

Module I: (10 HOURS)

Basic concept of EIA and Methodologies

Initial environmental Examination, Elements of EIA, factors affecting EIA Impact evaluation and analysis, preparation of Environmental Base map, Classification of environmental parameters.

EIA Methodologies

Introduction, Criteria for the selection of EIA Methodology, EIA methods, Ad-hoc methods, matrix methods, Network method Environmental Media Quality Index method, overlay methods, cost/Benefit Analysis.

Module II: (10 HOURS)

Impact of Developmental Activities and Land use.

Introduction, Methodology for the assessment of soil and groundwater, Delineation of study area, Identification of activities. Assessment of Impact of development Activities on Vegetation and wildlife, environmental Impact of Deforestation – Causes and effects of deforestation.

Module III: (10 HOURS)

Prediction and Assessment of Impact

Quality, Impact prediction, Assessment of Impact significance, Identification and Incorporation of mitigation measures. EIA in surface water, Air and Biological environment: Methodology for the assessment of Impacts on surface water environment, Air pollution sources, generalized approach for assessment of Air pollution Impact.

Module IV: (10 HOURS)

Environmental Audit & Environmental legislation

Objectives of Environmental Audit, Types of environmental Audit, Audit protocol, stages of Environmental Audit, on-site activities, evaluation of Audit data and preparation of Audit report. Case studies and preparation: of Environmental Impact assessment statement for various Industries.

TEXT BOOKS

1. Environmental Impact Assessment Methodologies, by Y. Anjaneyulu, B.S.Publication, Sultan Bazar, Hyderabad.
2. Environmental Science and Engineering, by J. Glynn and Gary W. Hein Ke, Prentice Hall Publishers

REFERENCE BOOKS

1. Cauter R.L, Environmental impact Assessment, McGrawHill International Edition, 1997
2. John G Rau and David C Wooten, Environmental impact Analysis hand book, McGrawHill Book Company 1980
3. Environmental Science and Engineering, by Suresh K. Dhaneja – S.K.,Katania & Sons Publication., New Delhi