

BES –C-801 Environmental Impact assessment

UNIT 1

Environmental impact assessment (EIA): definitions, introduction and concepts; rationale and historical development of EIA; scope and methodologies of EIA. Cost-Benefit analysis

UNIT 2

Life cycle assessment; environmental appraisal; environmental management – principles, problems and strategies; environmental planning; environmental audit; introduction to ISO 14000; sustainable development.

UNIT 3

Role of project proponents, project developers and consultants; Terms of Reference; impact identification and prediction; baseline data collection; Environmental Impact Statement (EIS), Environmental Management Plan (EMP)

UNIT 4

EIA regulations in India; status of EIA in India; current issues in EIA; case study of hydropower projects/ thermal projects. Rapid EIA; Strategic Environmental Assessment; Social Impact Assessment;

Unit – 5

Risk assessment: introduction and scope; project planning; exposure assessment; toxicity assessment; hazard identification and assessment; risk characterization; risk communication; environmental monitoring; community involvement; legal and regulatory framework; human and ecological risk assessment.