

Department of Civil Engineering

Environmental Impact Assessment (CEL 797) Major Examination

May 8, 2007 (10.30- 12.30 hrs)

Max Marks = 100

Note: Assume missing data (if any) and indicate the same. Use neat sketch to add clarity.

- Q.1 The sites(s) selection for any regulated developmental activity can be an effective approach in minimizing the requirement of mitigation measures for environmental impacts. List any four siting criteria delineated by Ministry of Environment and Forests, Govt of India. Also briefly discuss the spirit behind these siting criteria. [10]
- Q.2 Justify/ negate the following: [10]
"The EIA is neither intended to disrupt nor to impede economic development. A project plan, with inputs from EIA is likely to have a higher benefit/cost ratio than a plan, which is not responsive to environmental needs, especially when long-term as well as short-term effects are considered."
- Q.3 Discuss in brief the use of "Matrix" as a tool for environmental impact assessment. Also give one example showing its role in comparing alternatives. [10]
- Q.4 Discuss in brief the advantages and disadvantages of "Networks" as a tool for environmental impact predictions. Also give an example explaining its role in planning for mitigation measures. [10]
- Q.5 Explain in brief the concepts of industrial ecology, with the help of an example. Also discuss the barriers and prospects of the eco-industrial parks in developing countries. [10]
- Q.6 Describe in brief the steps involved in selling carbon credits. Also discuss the challenges involved in quantifying carbon credits. [10]
- Q.7 List important considerations in baseline data collection including the criteria for selection of parameters, monitoring sites and monitoring frequency for detailed Environmental Impact Assessment. [10]
- Q.8 Suggest "noise barriers" for the following:
- a. Construction activities [5]
 - b. Highway [5]
- Q.9 Discuss in brief the role of mathematical models for prediction of environmental impacts. [5]
- Q.10 Discuss advantages and limitations of Life Cycle Assessment (LCA) of a Product, by giving an example. [5]
- Q.11 Socio-economic effects due to the implementation of the project may be beneficial as well as detrimental to the social structure in the project area. List two examples each of detrimental impacts and beneficial impacts. [5]
- Q.12 List major benefits of involving local people in deciding as well as monitoring of rehabilitation and resettlement action plan. [5]
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