

RECE-006: Environment & Resource Economics  
Term End Examination, June 2014

*Maximum Marks: 100*

*Time: 3 hours*

*Note: You are required to answer two questions from Section A and five questions from Section B.*

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**Section A**

Answer any two questions from this section.

2 × 20 = 40

1. Why would you suggest market-based policy tools for mitigating the greenhouse gases emissions? Discuss the working mechanism of your suggested policy in the presence of externality problem.
2. A polluting industry consists of two firms with each having profit function of  $\Pi_j = \Pi_0 + AE_j - BE_j^2/2$ , where  $E_j$  is the level of emissions for firm  $j$  in tons. If there is an emission tax of amount  $t$  per ton, find the level of emissions to be set by the firms.
  - a) What is aggregate marginal saving function of the industry from emission?
  - b) If there is an emission cap-and-trade programme where allowances cost price per ton is  $P$ , find the level of emission set by each firm.
3. Critically examine the conditions of replacement cost method to measure economic value.
4. Explain the conditions under which marketable permits and effluent fee will produce equal distortion. Discuss the features of marginal cost curves for such an outcome to be realized.

**Section B**

**Answer any five questions from this section 5×12 = 60**

5. Using Montreal protocol evaluate the management of global consequences of Ozone depletion.
6. Discuss the important issues associated with trade and environment.

7. Through formulation of pollution heaven hypothesis, what would you like to test? Give reasons in support of your answer.
8. Explain the flexibility mechanism under Kyoto Protocol.
9. Make a list of the key institutions in India involved in formulating and enforcing environmental acts and rules. Discuss the key challenges confronting them.
10. Explain compensating variation and equivalent variation for price increase of an environmental good.
11. Explain the reasons for willingness to pay to be different from willingness to accept.