2023

ECONOMICS

Paper: ECO-3066

(Environmental Economics)

Full Marks: 80

Time: Three hours

The figures in the margin indicate full marks for the questions.

- 1. Answer *all* the questions: $5\times4=20$
 - (a) State and explain the laws of thermodynamics.
 - (b) "Poverty is the greatest polluter." Elaborate the statement in the context of environmental degradation.
 - (c) Discuss the biotic and abiotic components of an ecosystem.
 - (d) Explain how price acts as an indicator of relative scarcity.

- 2. Answer **any three** out of the following questions: 10×3=30
 - (a) Why do we need multilateral environmental agreements? Using suitable examples, discuss the characteristics of an MEA that target the loss of biodiversity. 2+8=10
 - (b) "Most market failures with environmental assets can be linked in one way or another to incomplete markets." Justify the statement with suitable example.
 - (c) Describe the main components of a successful contingent valuation study. What are the problems associated with contingent valuation study? 7+3=10
 - (d) What is ecological succession? Explain the implications of ecology on the functioning of the human economy.

4+6=10

(e) What is an environmental Impact statement? Discuss the stages of an environmental impact assessment.

4+6=10

3. Answer any two of the following:

 $15 \times 2 = 30$

- (a) State and explain the focus of the Hedonic Price theory. Derive the bid function, offer functions and the hedonic price function. Show how equilibrium is attained in a Hedonic Market.

 3+8+4=15
- (b) Discuss the respective effectiveness of taxes and tradable pollution permits in prevention, control and abatement of pollution.
- (c) Describe the conditions that must hold while depleting an exhaustible resource along an optimal depletion path.