

Ex/ECO/UG/DSE 5.1/2024

BACHELOR OF ARTS EXAMINATION, 2024

(3rd Year, 1st Semester)

ECONOMICS

PAPER : DSE 5.1

(Resource and Environmental Economics)

Time : Two Hours

Full Marks : 30

The figures in the margin indicate full marks.

1. Answer **any two** of the following questions : $5 \times 2 = 10$

(a) What is a backstop? Show that the price of a backstop sets an upper limit on the price of an exhaustible resource. $1+4$

(b) What would be the decisive factor in choosing between 'tax' and 'standard' as an effective economic tool for pollution control? 5

(c) State Daly's operational principles to achieve sustainable development. What are the problems with the method of execution? $3+2$

2. Answer **any two** of the following questions : $10 \times 2 = 20$

(a) Distinguish between flow and stock damage pollution. Derive the steady-state condition for the optimal level of stock pollutant over an infinite time horizon. Is there any difference in the optimal condition of flow pollutants? Illustrate diagrammatically. $2+6+2$

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[Turn Over]

(2)

- (b) (i) When would you expect WTP and WTA to differ and under what circumstance would you expect them to be the same?
- (ii) Describe how the hedonic price method can accommodate the 'quality of air' as a factor in determining the housing price in the market. $3+7$
- (c) (i) Derive the fundamental rule of renewable resource exploitation based on steady-state conditions.
- (ii) Do you agree that an increase in the discount rate causes exhaustible resources to be depleted quickly?
- (iii) How do you explain the role of resource stock behind the discontinuous price path of exhaustible resources? $4+3+3$

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