

Final examination:
Environmental Economic Theory
(Fall Term)

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NAME:

Write down your answers in the separate sheet. When you answer, make clear which question you are answering. Use mathematics, diagrams or figures to show your understandings.

1. Answer the following questions on voluntary action by producers to solve environmental problems. (Suggested time: about 10 minutes)
 - (1) Explain why some types of environmental problems are solved by voluntary action of involved actors, without any intervention of the government or authorities. Give a concrete example of voluntary action which successfully solved an environmental problem.
 - (2) Explain merits *and* demerits of voluntary action.
2. Explain how the optimal supply of public goods is obtained, by means of a figure. (Suggested time: 10 minutes.)

Please turn over. You can find more questions.

3. Answer the following questions on an emission-charge scheme.

(Suggested time: about 15 minutes)

(1) Show an emission-charge scheme is cost effective in an economy where there are multiple dischargers.

(2) What is the difference between an emission-charge scheme and a command-and-control scheme in income distribution?

(3) Explain how an emission-subsidy scheme brings about the same result as an emission-charge scheme.

4. What is “technology forcing” which is promoted by command-and-control? (Suggested time: about 10 minutes)

5. When there is uncertainty, an emission-charge scheme and a tradable emission-permit (transferable discharge permit) scheme have different effects. Explain why. (Suggested time: about 15 minutes)