

Name: _____ Pledge (sign): _____

Env Studies 201 Test #3

Point Total: 100 pts possible

- 5 pts 1. Who is Lois Gibbs? Be brief (1-2 sentences).
- 5 pts 2. **TRUE** or **FALSE** (circle one): a company can be liable for cleanup of hazardous wastes under CERCLA even if the waste disposal was legal at the time.
- 5 pts 3. **TRUE** or **FALSE** (circle one): ozone depletion has caused a net global cooling. Briefly (1 sentence) justify your answer.
- 5 pts 4. What are the two biggest reasons for fish/shellfish consumption advisories?
- 5 pts 5. Sandra Steingraber asserts that 80–90% of cancer is caused by environmental factors, a claim supported by a number of other studies. What does the term 'environmental' mean in this context?
- 6 pts 6. What are the 'ozone precursors' that are responsible for the formation of photochemical smog? List them, as well as all the human activities that generate them.

6 pts 7. (a) What are the main pollutants that degrade water quality? List as many as you can.

6 pts (b) What are the main human activities that produce these pollutants? List as many as you can.

6 pts (c) Which of these activities do you feel is the most damaging to water quality? Justify your choice, and explain how the activity causes problems.

5 pts 8. (a) Referring to the Helsinki Protocol, Scott Barrett states that 'the acid rain game is highly asymmetric.' What does he mean by this statement?

8 pts (b) Barrett was surprised by the success of the Montreal Protocol. Briefly (3–5 sentences) describe the protocol, and explain what was so surprising about its success.

9. Two distinct modes of pollution regulation are *command-and-control* (CAC) and *market-based* regulation.

6 pts (a) What is CAC regulation? In your answer, be sure to state the three basic forms of CAC regulation.

6 pts (b) What is market-based regulation? In your answer, state the two basic types of incentive-based regulation.

6 pts (c) Compare the advantages and drawbacks of these methods to regulate pollution.

8 pts 10. What was the PM controversy? In your answer, be sure to elaborate on the fundamental values conflict between the opposing sides in the controversy, making the Precautionary Principle a prominent part of your answer.

12 pts 11. Choose ONE of the following and answer.

- (a) In some detail, explain how toxicological and epidemiological data can be used to set 'health-based' ambient pollution standards. In your answer, be sure to explain the NOAEL and explain its importance in setting health-based standards.
- (b) Health-based pollution standards are sometimes criticized on an economic basis. What is the nature of this criticism? How is it justified on ethical grounds? How would defenders of health-based standards reply to such criticism?