

Name: \_\_\_\_\_ Pledge: \_\_\_\_\_

## Env Studies 201 Test #3

**Point Total:** 100 pts possible

- 4 pts 1. Which use demands more water, irrigation or human consumption (ie, drinking water)?
- 12 pts 2. What are the *criteria pollutants* under the Clean Air Act? List them. For each one, state the human activity (or activities) that result in its presence in the air.
- 8 pts 3. What are the main pollutants of concern in global climate change? *Be complete.* (Hint: it's not just the greenhouse gases.)

8 pts 4. What are the primary justifications for establishing 'pollution markets?'

8 pts 5. (a) Under CERCLA, liability for cleanup costs is both *retroactive* and *joint and several*. What does that mean?

10 pts (b) The liability scheme in CERCLA is controversial. Yet Katherine Probst cautions that eliminating it may well cause cleanup costs to rise. What are some reasons this might occur? Answer in a little detail.

8 pts 6. What are *dead zones*, and how are they caused by human activity?

8 pts 7. How is the ozone layer formed?

10 pts 8. Quantitative estimates of the risk posed by low levels of toxic pollutants can be difficult to determine. What are the principal methods used in risk assessment, and what are their associated difficulties?

12 pts 9. What is the *precautionary principle*? Answer in a little detail, using the concepts of type I and type II errors. Also illustrate the principle using the positions adopted by Carol Browner and Dan Menzel regarding the revised PM air quality standards proposed by the EPA in 1997.

12 pts 10. What were some of the key elements of the Montreal Protocol in making it surprisingly effective in halting ozone depletion? Answer in some detail.