

Name: _____ Pledge (sign): _____

Env Studies 201 Test #2

Point Total: 100 pts possible

- 4 pts 1. Give good estimates of (a) the current global population and (b) the current US population.
- 5 pts 2. What are currently the top five energy sources in the US? List them in order, with the most important source first.
- 4 pts 3. What are Hardin's two solutions to the 'tragedy of the commons?'
- 6 pts 4. Describe and briefly explain the distinction between *overshoot and oscillation* and *overshoot and collapse*.
- 6 pts 5. What is meant by *logistic population growth*? Illustrate your answer with a labelled graph, and include a definition of the term *carrying capacity*.

5 pts 6. (a) What does the phrase *sustainable agriculture* mean?

6 pts (b) What are some of the typical practices advocated by supporters of sustainable agriculture? List as many as you can.

6 pts 7. (a) What are the potential advantages of the hydrogen economy? List as many as you can and briefly (1 sentence each) explain each.

6 pts (b) List some potential roadblocks to implementing this energy system. Be complete—list as many items as you can.

8 pts 8. Would Julian Simon be an adherent to *weak* or *strong* sustainability? Briefly justify your answer, making sure to define the two terms.

8 pts 9. What is *pesticide resistance* and why is it a problem?

6 pts 10. (a) What is the *Green Revolution*?

6 pts (b) What are the environmental costs of the Green Revolution? List as many items as you can.

10 pts 11. How does Hardin's 'tragedy of the commons' lead to environmental degradation? Answer in some detail; use the Prisoner's Dilemma in your explanation.

- 14 pts 12. Choose *one* of the following and answer *in some detail*. In either case, you might want to use labelled diagrams to clarify your answer.
- (a) Campbell and Laherrère predicted 'the end of cheap oil.' What was their reasoning?
 - (b) Two rebuttals commonly used against neo-Malthusians are the existence of *demographic transitions* and *environmental Kuznet curves*. Explain the nature of these two rebuttals.