Economics 3250 Spring 2012 Dr. Lozada Exam 2

Do Not Turn This Page Over Until You Are So Instructed!

This exam has 25 points. There are six questions on the exam. Most of the questions are worth 4 points, but one is worth 5 points.

Put your answers to the exam in a blue book or on blank sheets of paper.

You have the entire class period (that is, until **2:45pm**) to take this test.

Answer the questions using as much precision and detail as the time allows. Correct answers which are unsupported by explanations will not be awarded points.

Answer all of the following six questions.

1. [5 points] Draw a graph with *abatement* (not pollution nor output) on the horizontal axis and "dollars per unit of abatement" on the vertical axis. Draw a "marginal abatement cost" ("MAC") curve on this graph (and explain it).

Suppose a tax on pollution (that is, a tax on non-abatement) is imposed by the government.

- (a) What level of abatement will the firm choose? Show this on your graph. Explain.
- (b) Show on the graph how much tax the firm will pay. Explain.
- 2. [4 points] Which system of pollution control, marketable permits or pollution taxes, is less problematic when it comes to allowing new firms to enter a market? Why? Why is this important?
- 3. [4 points] Describe in detail the relationship between the two graphs in Figure 1.



Figure 1.

- 4. **[4 points]** Contrast the "pattern of exhaustible resource use through time" implied by:
 - using an "exponential exhaustion index"; and
 - using the Hotelling Rule.
- 5. **[4 points]** In what sense are economists skeptical of the adequacy of voluntary pollution reductions by firms?
- 6. [4 **points**] "Command and control" is the traditional approach to most environmental regulation. In what sense has regulation of municipal solid waste been an exception?