Economics 3250   Dr. Lozada
Spring 2011   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.

You have **one hour** (that is, until **2:25pm**) to take this test. After the test is over, I'll lecture until the regular class period ends.

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. [**4 points**] Draw a graph with Output on the horizontal axis
   and "dollars per unit" on the vertical axis. Draw on this graph a
   Marginal External Cost curve and a Marginal Net Private Benefit
   curve.

   (a) Explain what area on your graph represents profit if there is
       no regulation.

   (b) Explain how to interpret each portion of the area you iden-
       tified in part (a) if the government now imposes an optimal
       pollution standard on the industry.

   (c) Explain how to interpret each portion of the area you iden-
       tified in part (a) if the government now imposes an optimal
       pollution tax on the industry.

2. [**4 points**] Explain why a tradeable permit pollution control
   scheme is more efficient than using a pollution "standard." You
   needn't use the numerical example that was given in class, but
   you should use some sort of numerical or algebraic example.

3. [**4 points**] What is "rent seeking" in the context of pollution
   regulation?

4. [**5 points**]

   (a) Draw a graph with fishing Effort on the horizontal axis and
       dollars on the vertical axis. On this graph, draw a Steady-
       State Revenue curve and a total Cost curve (that is, a "Cost
       of Effort" curve). ("Steady-state" means "sustainable.")

   (b) On this graph, show the Open Access equilibrium point. Ex-
       plain why your answer is correct.

   (c) Show that there is another level of effort which would give
       rise to the same level of steady-state revenue as in part (b)
       with less effort, and thus more profit and more fish, than in
       part (b).

5. [**4 points**] Draw a graph of (instantaneous) profit versus (in-
   stantaneous) quantity for a mining firm. On this graph, show
   how quantity and profit changes over time for a firm which does
   follow the Hotelling Rule. Explain why your answer is correct.

6. [**4 points**]   What is a "deposit-refund system" and why would one be used?