

Economics 3250  
Spring 2005

Dr. Lozada  
Final Exam

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

This exam has 50 points. There are twelve questions on the exam. Each is worth 6 points except for Question 2, which is worth 8 points, and Question 4, which is worth 7 points.

Put your answers to the exam in a blue book or on blank sheets of paper. You have **two hours** to take this test.

Answer the questions using as much precision and detail as possible. Correct answers which are unsupported by explanations will not be awarded points. Therefore, even if you think something is "obvious," do not omit it. If you omit anything, you will not get credit for it. You get credit for nothing which does not explicitly appear in your answer. If you have questions about the adequacy of an explanation of yours during the exam, ask me.

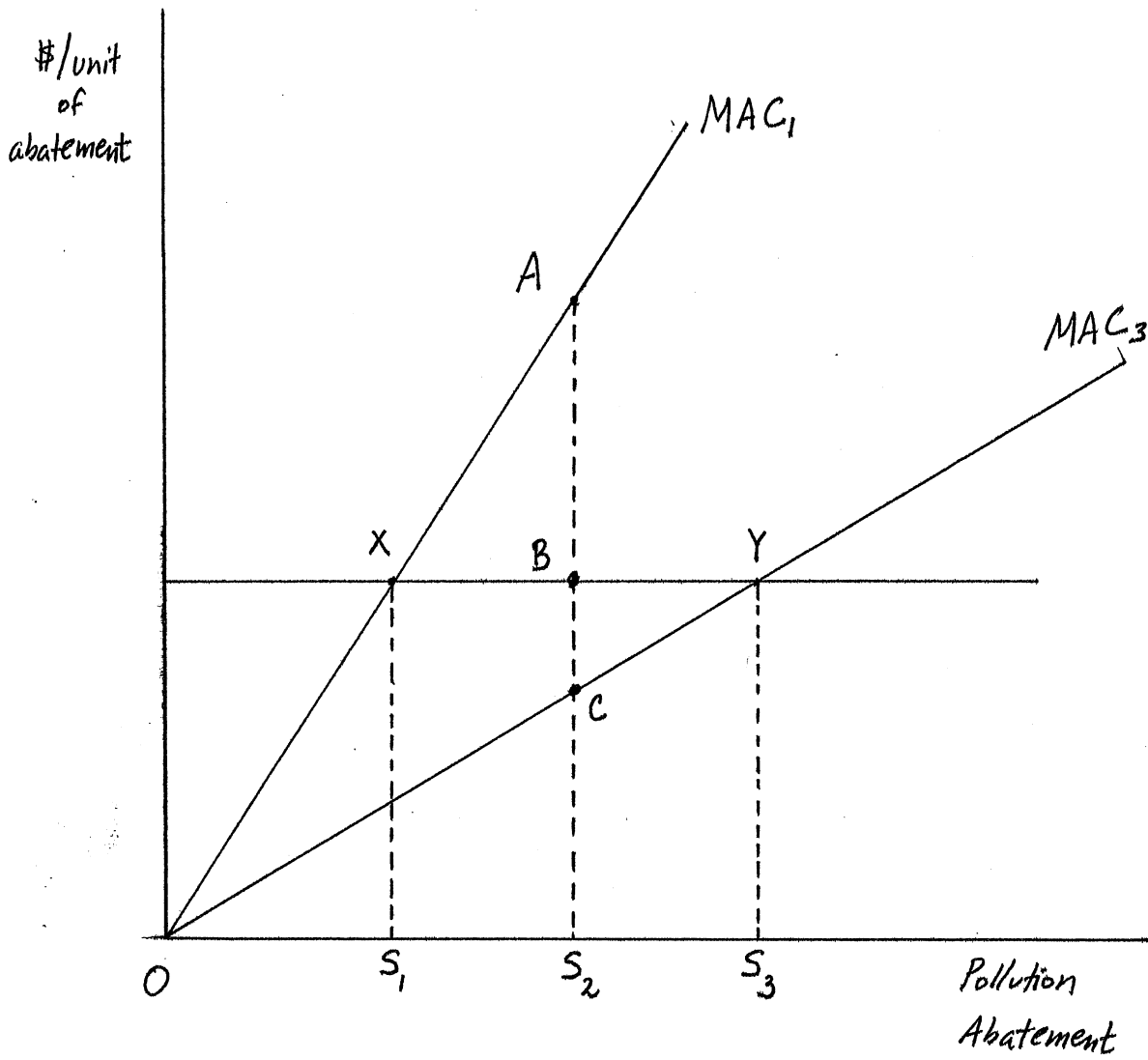
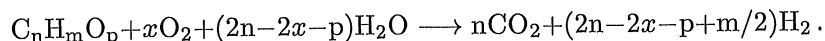


Figure 1

**Answer all of the following twelve questions.  
Each is worth 6 points except for Questions 2 and 4.**

1. Give an example of a good which is neither exclusive nor rival. Explain why it is neither exclusive nor rival.
2. [8 points] Define:
  - (a) use value
  - (b) nonuse value
  - (c) direct use value
  - (d) indirect use value
  - (e) option value
  - (f) bequest value
  - (g) existence value
  - (h) total economic value.
3. Both your textbook and my lectures included discussions of several types of errors which people often make when assessing the probabilities with which events occur. Name one type of such an error, explain it, and give an example of it.
4. [7 points] Tell me everything you know about Figure 1. This should include describing how Figure 1 can be used to make an important conceptual point. In Figure 1, assume that  $S_2$  is halfway between  $S_1$  and  $S_3$ .
5. The “Theory of the Second-Best” shows that if a market is “imperfect” in more than one way, then eliminating just one of those imperfections may not lead to any improvement in social welfare. Use this to argue that eliminating the imperfection of Mexican tariffs on imports of US corn—in other words, establishing free trade for US farmers wishing to export to Mexico—may not lead to any improvement in social welfare. (You will have to identify at least one environmental externality in your argument.)
6. Answer *either* part (a) *or* part (b) below, but not both.
  - (a) What role did emissions trading have in affecting whether the Kyoto Protocol went into effect?

- (b) What is the importance for global warming of the chemical equation below?



7. How can tariffs on agricultural imports adversely affect biodiversity?
8. What do you think of the argument that environmental problems will be solved without particular attention if an economy grows fast enough?
9. Suppose a deck of cards is shuffled. Is the resulting reordering of the cards an example of entropy increase? Why or why not?
10. On page 35 of your textbook, your authors write:

But a problem arises because of the ‘contingency’ of *future people*, i.e. the fact that they may not exist at all; from the viewpoint of the present they are only ‘possible’ people, and the number and type of people depend in large measure upon current actions and decisions. It may not now be clear, therefore, who holds the rights. Take a resource allocation policy which has two alternative variants—fast growth [and fast population growth] and resource depletion over the next 200 years; or low growth [and low population growth] and conservation. Depending on which choice was made, two sets of possible people can be envisaged, but only one set will become actual people... Our intuition, of course, says conservation policy is desirable because its set of actual people would have been relatively better off. Assuming this ‘person-affecting view’, it is not clear to whom rights will belong in the future—called the ‘non-identity problem.’

How could someone argue against the authors’ opinion that the conservation policy is desirable? How might the authors respond to this argument?

11. Why would anyone be interested in Kenneth Boulding’s technique for limiting the growth of the human population? (You have to describe the technique.)
12. The World Commission on Environment and Development (the “Brundtland Commission”) defined “Sustainable Development” as:

development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Comment on the feasibility of this idea.