

Worksheet 4, October 15, 2019

I advise you to work through the following problems /questions well and as a group (make sure though that no one is free-riding); it's the ticket to performing reasonably well on the exams. Number of points indicates the expected scope of the answer (should roughly correspond to time in minutes).

1. **[10 points]** Briefly explain the purpose of the Virginia NOx allowance auction. Summarize, in your own words, which are the most important lessons that we can learn from this article.
2. **[5 points]** Assume that there are three bidders that have willingness to pay of 10, 8, and 6 for a homogeneous good of which two units (inelastic supply) are being offered. Explain why the expected revenue of a (first-price) sealed-bid auctions and a standard ascending (English) clock auction might lead to different revenue predictions. Looking at this simple example, which seems to be the preferable auction style (from the perspective of the supplier)?
3. **[10 points]** Do you think that in the real world a third-party certification is a way to improve environmental quality? How good a job can cheap-talk signals from companies with well established reputation do?
4. **[20 points]** Briefly summarize the main objectives and the main findings in Cason and Gangadharan (2002). Also
 - a. Why do you think the initial periods of REPUTATIONS ONLY are not significantly different than BASELINE but then, in later periods the production of SUPERS increases (in REPs ONLY)?
 - b. Explain intuitively why the cheap-talk signals in early periods increase the production of SUPERS but then in time the effect disappears?
 - c. Is there any problem in the last period of REPUTATIONS ONLY? Why does this problem not exist with certification?
 - d. Why do you think certification is much more efficient in increasing the production of SUPERS?