Worksheet 3, March 10 - 17, 2020

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]** Briefly discuss the auction designs considered for allocating NOx allowances in Porter et al. experiments. Explain briefly which are the advantages and disadvantages of individual options.
3. **[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)?
4. **[15 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? Also discuss in light of your own customer experience or certification scandals that you might have read about. Which is the principal problem with the third-party certification? Does it mean that we should not rely on it at all?
5. **[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?
6. **[10 points]** Which is the key difference in information availability between the Cason and Gangadhar experiment and the real-world certification of environmentally friendly products (are we able to learn the true quality of goods "produced in environmentally friendly way")? What does in mean for the real-life recommendation based on the results of this experiment? In other words, which treatments are more difficult to establish if customers do not get a perfect information about the environmental quality of the product after consuming it? Can other treatment(s) serve in that case? With which problem(s)?