You need to answer all three questions on this exam.

You have until 4 PM to finish. Answer the questions using as much precision and detail as the time allows.

The questions are equally weighted.

Answer all of the following three questions.

1. Suppose you are asked to give a 30-minute talk about the Hotelling Rule to a group of economics professors who have not studied resource economics. All of the audience is interested in the neoclassical result, but a few of them will also be interested in critical perspectives on the Hotelling Rule. Describe your talk.

2. This question is an extension of a question which was asked on a previous field exam. Attached to this exam you will find a 2-page-long answer to the old question; here is the old question itself, with the sentence I will later ask you to change written in italics:

   > In the 11-page typewritten handout on fisheries economics [...], the first paragraph of Section 3 deals with private-property competition in schooling fisheries.
   >
   > *Suppose F takes the logistic form $rx(1 - x/K)$.*
   >
   > Illustrate the *dynamic* evolution of this system, using a phase diagram. You do not have to re-derive any formula you find in my fisheries handout.
   >
   > There are two cases you should consider: in the first, the intrinsic growth rate is less than the rate of discount; in the second, the intrinsic growth rate is more than the rate of discount.
   >
   > It is not interesting to consider the case in which costs are so high that profit is always negative. It is also not interesting to consider dynamic paths in which profit is always negative.

   Change the sentence in italics to read: Suppose F takes a non-logistic form: in particular, suppose the species exhibits critical depensation. (Hint: recall this means that $F < 0$ for small x.) With this change, re-work the problem.

3. I entered "entropy environment" into the Google search engine today. The first site included the web page attached to this exam. Give your opinion of it.