Questions and Problems, III (maximum of 80 points out of 75)

**Instructions:** Each problem is keyed by the number of points it is worth and the minimum page length. The page length refers to a page with one inch margins, times new roman font, and a font size of 12. A page will have a minimum of 23 double spaced lines. Include your name and question/problem number at the top of the page. This allows 20 lines for your response. Your response is to be typed, however, you may do mathematical calculations and graphs neatly in pen or pencil. Question/problems prefaced with an asterisk (*) are required. You may turn in as many questions/problems as you like, but the maximum number of points that can be earned is given at the top for each set. No questions/problems will be accepted after the assigned due date.

17-1 (10 pts, 1 page) Contrast the engineering approach and the macroeconomic approach to estimating the cost of environmental protection. Why does the latter consistently find a much lower cost than the former.

*17-2 (10 pts, 1 page) Summarize the three studies on the impact of lowering carbon dioxide emissions discussed in your text.

17-3 (10 pts, 1 page) Discuss the three basic economic perspectives on the relationship between international trade and environmental protection or degradation.

18-1 (10 pts, 1 page) What are the major factors that influence global temperature. Explain which you feel are most amiable to being influenced by public policy.

18-2 (15 pts, 1 ½ pages) Summarize the Nordhaus conclusions with respect to the economics of climate change. How are his conclusions dependent on his assumptions related to discounting, energy use, and future damage? See the discussion in Ch. 18, the discussion of the DICE model in Ch. 20, and the critique of the Nordhaus model by R. Costanza, “Managing the Commons.”


18-4 (10 pts, 1 page) Summarize the findings of the Resources for the Future study on three approaches to allocating carbon emission allowances in the electricity sector. See RFF, Fall 2001, “Carbon Emission Trading Costs and Allowance Allocations.”

20-1 (10 pts, 1 page) Discuss the assumptions and implications for efficiency and sustainability of the Hardtack Model. Explain what lessons can be draw from the Hardtack model for use in the real world?

20-2 (10 pts, 1 page) Do you believe humankind is winning the “Great Race?” Why or why not?

*20-3 (10 pts, 1 page) Discuss the concept of a “safe minimum standard” in the context of the