THE UNIVERSITY of York

Degree Examination 2004

ENVIRONMENT DEPARTMENT

MSc in Environmental Economics
MSc in Environmental Economics and Environmental Management
MPhil Qualifying Examination

ENVIRONMENTAL ECONOMICS

Time allowed: two hours

Instructions: Answer TWO questions out of FOUR
All questions are equally weighted. All parts of each question are also equally weighted. Answer all parts of the questions.

Pay adequate attention to spelling, punctuation and grammar, so that your answers can be readily understood
Question 1

'Economic growth is a better route to environmental protection than environmental regulations'. Discuss. (25 marks)

Question 2

Consider the following problem. Two firms are located along the banks of the same river. One lies upstream of the other. The upstream firm discharges waste into the river, thereby increasing the cost of water treatment by the downstream firm.

a) Show how the problem might be addressed through the use of taxes, and demonstrate the efficiency of taxes on (i) inputs in the polluting industry and (ii) waste emissions from the polluting industry. (15 marks)

b) Could this problem be addressed through the assignment of property rights? Would the assignment of rights give an efficient outcome? Would it have distributional implications and would these matter? (10 marks)

Question 3

Discuss the relative advantages and disadvantages of the main methods for valuing non-marketed environmental resources. (25 marks)

Question 4

a) Biodiversity is a global public good. The loss of biodiversity in one country has implications for welfare in other countries, and its conservation requires international agreement. Explain the problems encountered in achieving environmental goals through international agreements. (10 marks)

b) Consider Barrett’s arguments about the significance of the number of signatories to an international environmental agreement. What effect does the number of signatories have on the potential gains from cooperation? Given your answer to this question, discuss the effectiveness of the Convention on Biological Diversity. (15 marks)