

**2580001**

**THE UNIVERSITY *of York***

**Degree Examination 2004**

**ENVIRONMENT DEPARTMENT**

**MSc in Environmental Economics  
MSc in Environmental Economics and Environmental Management  
MRes in Ecology and Environmental Management**

**POLLUTION EFFECTS ON SOIL/PLANT/WATER ECOSYSTEMS**

**Time allowed: two hours**

**Answer **TWO** questions out of **FOUR****

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

1. What evidence is there to show that acid rain has damaged upland peat soils in Britain? In your answer, critically discuss evidence for effects upon soil chemical, biological and physical properties. Why should much of this evidence only be regarded as circumstantial evidence for damage to peat soils by acid deposition?
2. Discuss the possible effects of rising carbon dioxide concentration in the atmosphere upon upland terrestrial ecosystems in the UK.
3. How and why can deposition of sea salts of oceanic origin from the atmosphere be exploited in the UK and Ireland to assess the sensitivity of catchment soils and surface waters to acidification from acid deposition or forestation?
4. How and why does water chemical quality change during storm and/or snow melt events in upland rivers in Britain? How does an understanding of these processes help in understanding how atmospheric pollution is likely to affect surface water in British upland catchments over a range of time scales?