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THE UNIVERSITY *of York*

Degree Examination 2005

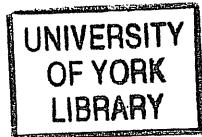
ENVIRONMENT DEPARTMENT

BSc in Environment, Economics and Ecology, Part II

SUSTAINABLE USE OF SOIL AND WATER RESOURCES

Time allowed: **two hours**

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



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

1. What is limiting the large-scale expansion of organic agriculture in the United Kingdom? Justify your opinions. Your answer should include, for example, discussion of problems associated with maintaining soil fertility in acceptable ways, labour problems, control of weeds and other pests, seasonality of supply of products and ability to meet customer requirements.
2. Describe the interactive processes that regulate the pH of soils in natural (unmanaged) ecosystems in the long term. How can irrigation influence soil pH and, in the longer term, soil and freshwater sustainability?
3. In the UK, politicians would like to be able to monitor “soil health” at a national scale as a demonstration of their “concern” about the environment. What advice would you give them if they embarked upon this approach?
4. Critically discuss the methods employed to quantify weathering rates in British upland catchments.