

OLLSCOIL NA hÉIREANN
NATIONAL UNIVERSITY OF IRELAND, GALWAY

SUMMER EXAMINATIONS, 2000

**B.Sc. DEGREE (HONOURS: DENOMINATED DEGREE IN
ENVIRONMENTAL SCIENCE)**

APPLIED ECOLOGY AND PALAEOECOLOGY

Professor P. Gahan
Professor E. Colleran
Dr M. Sheehy Skeffington
Dr J. Fuller

Time allowed: **Three** hours.

Answer **three** questions, **at least one** from each section.

SECTION A

1. In the last decade there has been increasing recognition of the heritage value of 'marginal' communities throughout Europe. Critically evaluate some agri-environmental schemes in operation on the island of Ireland with particular reference to the Burren, Co. Clare.
2. As a senior member of Dúchas, The Heritage Service, make a detailed scientifically-based case for the development and management of both National Parks and National Nature Reserves in Ireland. In your answer refer to sites and habitats with which you are familiar.
3. Ireland has an international obligation to conserve certain specific habitats. With reference to peatlands, evaluate the Irish examples of these and suggest methods whereby they can be prioritised for conservation.

SECTION B

4. Describe and evaluate the contribution of long pollen records to our understanding of climatic change during the Quaternary.
5. Outline the main features of vegetation change during the Late-glacial and early Holocene in Ireland.
6. Discuss the palaeoecological evidence for atmospheric pollution leading to lake acidification in recent times.