

OLLSCOIL NA hÉIREANN
NATIONAL UNIVERSITY OF IRELAND, GALWAY

SUMMER EXAMINATIONS, 2000

B.Sc. DEGREE (HONOURS)

BOTANY

Second Paper

Professor P. Gahan
Professor M.D. Guiry
Dr J. Fuller

Time allowed: *Three* hours.

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

SECTION A

1. Describe in detail the ways in which you would test whether a particular response in an alga is related to the **periodicity** rather than to the **quantity** of light.
2. Give an account of the inheritance of Mendelian and non-Mendelian pigment mutations in red algae.
3. Write a comprehensive essay on the effects of tidal regimes on the phenology of an alga of your choice.

SECTION B

4. Describe and evaluate the main sources of evidence for climatic change during the late Quaternary.
5. Discuss the impact of human activity on vegetation and landscapes in Ireland during the Holocene.
6. What are the factors to consider when interpreting pollen diagrams?