

Ollscoil na hÉireann, Gaillimh
National University of Ireland, Galway
Semester I Examinations 2005 / 2006

GX032

Exam Code(s)	3BS9, 3ER3, 3EV1, 3EV2, 3MR3, 4EV2, 1OA1
Exam(s)	Third Science (Undenominated) Third Science (Earth Sciences) Third Science (Environmental Science) Third Science (Marine Science) Fourth Science (Environmental Science) Visiting Students
Module Code(s)	3BS9–BT306, 3ER3–BT306, 3EV1–BT306, 3EV2–BT306, 3MR3–BT306, 4EV2–BT306, 3BS9–BT316, 3ER3–BT316, 3EV1–BT316, 3EV2–BT316, 3MR3–BT316, 4EV2–BT316, 1OA1–BT316
Module(s)	BT306: Plant Ecology and Palaeoecology (Environmental Botany) BT316: Plant Ecology and Palaeoecology (Environmental Botany)
Paper No.	
Repeat Paper	
External Examiner(s)	Dr P.D. Moore
Internal Examiner(s)	Professor M. O'Connell Dr M. Sheehy Skeffington

Instructions: Answer **four** questions

Duration	3 hours
No. of Pages	2
Department(s)	Botany
Course Co-ordinator(s)	Professor M. O'Connell Dr M. Sheehy Skeffington

Requirements:

MCQ
Handout
Statistical Tables
Graph Paper
Log Graph Paper
Other Material

1. Give a concise account, with reference to a particular vegetation type, of a widely used method for vegetation survey and classification.
2. Describe the main steps in a typical pollen analytical investigation. Briefly consider the relative merits of peat versus lake sediment as sources of palaeoenvironmental information.
3. Discuss the effects of human impact on woodland cover in Ireland during prehistory. In your answer indicate, where appropriate, the sources of evidence for your reconstructions.
4. Give an account of the vegetation and ecology of raised bogs in Ireland. How did they evolve from fen ecosystems?
5. With reference to soils, describe the main Irish grassland types and their plant communities.
6. Write concise notes on two of the following:
 - i) podzols;
 - ii) calcicole and calcifuge species;
 - iii) soil nitrogen and how it is available to plants.
7. Write an essay on: *The time dimension of succession and its relevance to present-day plant communities.*