

NATIONAL UNIVERSITY OF IRELAND, GALWAY
Ollscoil na hEireann, Gaillimh.

THIRD SCIENCE EXAMINATIONS 2003

Zoology ZO305

Extern Examiner : Dr. John Breen
and Internal Examiners

Time allowed : Three Hours
Answer *four* questions

- Q 1. "A species is what a good systematist says is a species". Discuss, giving one definition of species that you think is useful and practical.
- Q 2. Write an essay on "the population (deme)", emphasising some aspects that are important for the evolution of species.
- Q 3. Distinguish between Reproductive Isolation and Geographic Isolation. List and describe briefly some reproductive isolating mechanisms observed in animals.
- Q 4. *Either* Describe briefly the Geological Timescale and outline the major physical and biological events associated with some named periods *or* Discuss whether the processes of microevolution explain adequately the process of macroevolution.
- Q 5. Write a general account of the process and products of gastrulation.
- Q 6. Describe how marine mammals cope with the problems associated with diving for extended periods at great depths.
- Q 7. Discuss the mammals considered to be native to Ireland, and the possible means by which they came to be on the island.