

NATIONAL UNIVERSITY OF IRELAND GALWAY

Ollscoil na hÉireann, Gaillimh

SUMMER EXAMINATIONS, 1998

Third Environmental Science

Environmental Zoology

Extern Examiner: Professor G. Fava

Intern Examiner: Professor P. O Ceidigh

Time allowed: Three hours.

Answer *five* questions, at least *two* from each section.

SECTION A

1. Write a brief essay on animal orientation.
2. Give an account of the social Hymenoptera.
3. Discuss *either* the concept of ecological niche *or* the nature of parasitism.
4. *Either* outline and discuss the river continuum concept *or* discuss the statement "the variable nature of the estuarine habitat, especially as defined by fluctuating salinities and temperatures, make it a particularly stressful and rigorous place to live".
5. Write an account of woodland birds.

SECTION B

6. *Either* Describe the endogenous and exogenous regulation of reproduction in marine animals *or* Describe with the aid of diagrams the adaptations of marine animals to planktonic existence and give an account of vertical migration.
7. Give a critical appreciation of animal-sediment relationships.
8. Write concise notes on current views regarding the phylogenetic position of both the Annelida and the Mollusca.
9. Write a short illustrated account of *two* of the following :
Nemertea ; Mesozoa; Ctenophora.
10. "Sponges are animals at the cellular rather than the tissue grade of construction". Discuss.