

Ollscoil na hEireann, Gaillimh
National University of Ireland, Galway

Semester II Examinations, 2005

BSc (Honours)

ZO405

Zoology

Extern Examiner : Dr. John Breen
and Internal Examiners

Answer *four* questions

Time Allowed : Three Hours

- Q 1. Write an essay on the genes controlling *either* segment number *or* segment identity in arthropods.
- Q 2. Discuss the concept of co-option of genes in the evolution of animal development. Illustrate your answer with an account of limb development in different groups of animals, and include reference to at least one of the genes that is repeatedly found to be involved in the process.
- Q 3. Discuss the biogeography of Ireland, with particular reference to freshwater fishes.
- Q 4. "Insects and acarines ~~are~~ are vitally important as vectors of disease". Discuss.
- Q 5. Write an essay on human parasitic worms in the phyla Platyhelminthes and Nematoda.
- Q 6. Describe the impact that DNA sequencing has had on animal classification and phylogeny reconstruction.
- Q 7. List some of the approaches used in classifying animals and with these in mind, discuss the relationships between the animal phyla.