

OLLSCOIL NA hÉIREANN

NATIONAL UNIVERSITY OF IRELAND, GALWAY

SUMMER EXAMINATIONS, 2004

Third Year (Denominated B.Sc. Degree in Marine Science; Honours)

Third Year (Undenominated Science)

MR 317/MR322: Marine Ecology II

Prof. M.J. Dring
and the internal examiners

Time allowed: 3 hours

*Answer four questions, at least one from each section.**Use a separate answer book for each section.*

SECTION A

1. Write an account of diel vertical migration in planktonic animals.
2. **EITHER**
Explain briefly the principal measurements that can be made using satellite based remote sensing techniques. What are the main advantages and disadvantages of using such measurements?

OR
Describe how you would organise a day's sampling for nutrients in a macrotidal estuary.
3. **EITHER**
Describe the sampling methodology known as SPI (Sediment Profile Imagery) and its perceived advantages over grab sampling in remote ecological monitoring of the seafloor.

OR
Write an account of the various methods of sampling zooplankton, processing such samples and standardizing the data.
4. Outline methods of measuring the underwater light field.

(p.t.o)

(MR317 contnd.)

SECTION B

5. Write an essay on marine pelagic lifestyles.
6. Provide a critical classification of the marine environment.
7. Write an appreciation of the effects of benthic organisms on the soft sea floor.
8. **EITHER**

Give an overall appreciation of the 'intertidal' as a habitat.

OR

Describe the rocky sublittoral as a habitat for benthic animals.