

## OLLSCOIL NA hÉIREANN

NATIONAL UNIVERSITY OF IRELAND, GALWAY

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SEMESTER I EXAMINATIONS, 2002

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**Third Year (Denominated B.Sc. Degree in Marine Science; Honours)***MR 316: Marine Ecology 1*Prof M.J. Dring  
and the internal examinersTime allowed: *Three hours.*Answer *four* questions, at least **ONE** from each section.Use a **SEPARATE** answer book for each section**SECTION A**

1. Describe the responses and adaptations of phytoplankton to variations in the quality and quantity of underwater irradiance
2. Write an essay on the seasonal succession of phytoplankton in temperate seas
3. Write an essay on microbially mediated processes in inshore sediments. How do these processes interact with the sediment environment?
4. Write an essay on microorganisms and hydrothermal vents. Where would you find the microorganisms, what are they doing and what is the importance of their activities to the vent ecosystem?

**SECTION B**

5. Describe the techniques used for the collection, examination and identification of wood-inhabiting marine fungi.

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**(MR316 Contd.)**

6. Describe the environmental factors that influence the flora and fauna of saltmarshes. How do these factors control the structure and composition of the saltmarsh ecosystem?
7. Write an essay on kelp forests.
8. Describe the different habitats occupied by red algae: which characteristics and adaptations enable (or force) them to live in each of these habitats?