

Ollscoil na hÉireann, Gaillimh
National University of Ireland, Galway

GX 2542

Semester II Examinations, 2003/2004

Front Page Template

Exam Code(s) 4BO2
Exam(s) 4th Biomedical Science
Module Code(s) SI403
Module(s) Physiology
Paper No. II
Repeat Paper Special Paper

External Examiner(s) Dr. D. Marples
Internal Examiner(s) Prof. M. Kane, Dr. S Grant, Dr. K. Doyle
Dr. A. Henry, Dr. A. Hynes, Dr. L. Quinlan

Instructions: Answer Four Questions. Students must attempt at least one question in each Section.
Use a Separate Answer Book for each section.

Duration Three hours
No. of Answer books Three

Requirements:

Handout
MCQ
Statistical Tables
Graph Paper
Log Graph Paper
Other Material

No. of Pages 2
Department(s) Physiology

OLLSCOIL NA hÉIREANN, GAILLIMH
NATIONAL UNIVERSITY OF IRELAND, GALWAY

Semester II, Summer 2004

B.Sc Biomedical Science (Hons.)

PHYSIOLOGY

Paper II

Examiners

Dr D. Marples, Prof. M. Kane, Dr. K. Doyle, Dr. A. Henry, Dr. A. Hynes, Dr. L. Quinlan,

Answer Four Questions. Students **must attempt at least one question in each Section.**
Use a Separate Answer Book for each section.

Time Allowed 3 hours

Section A

- A1** Write an essay on diving physiology including the mechanism of potential medical complications.
- A2** List reasons for the need to degrade body protein. What are the main pathways by which protein is degraded? Suggest a reason why unrestrained proteolysis occurs. Name at least two conditions in which this happens.

Section B

- B1** Describe the acute and long-term physiological adaptations to altitude in humans.
- B2** What are the benefits of heat acclimatisation for endurance athletes? (75%). How should endurance athletes carry out heat acclimatisation? (25%)

Section C

- C1** Discuss the pathophysiology of Alzheimer's Disease.
- C2** Discuss ion channel structure/function relationships in relation to ion channel associated diseases.