

Ollscoil na hÉireann, Gaillimh **GX2546**
National University of Ireland, Galway

Semester II Examinations, 2003/2004
Front Page Template

Exam Code(s)	4BO2
Exam(s)	4 th Biomedical Science
Module Code(s)	SI405
Module(s)	Physiology
Paper No.	IV
Repeat Paper	Special Paper
External Examiner(s)	Dr. D. Marples
Internal Examiner(s)	Prof. M. Kane
	Dr. K. Doyle
	Dr. L. Quinlan

Instructions:

Answer THREE Questions out of FOUR in the Two Selected Modules.
 DO NOT Attempt Questions in Module for which you are not registered.
 Use a Separate Answer Book for each section.
 Duration Two hours
 No. of Answer books Two

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 IV

Examiners

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

Answer **THREE** Questions out of **FOUR** in the **Two Selected Modules**.

DO NOT Attempt Questions in Module for which you are not registered.

Use a Separate Answer Book for each section.

Time Allowed 2 hours

Section A: Molecular Biology

- A1** Give an overview of the processes involved in the synthesis of a protein within a cell. Discuss the advantages of studying the proteome in comparison to the genome.
- A2** Discuss the pathways involved and role of apoptosis in cell physiology.

Section B: Second Messengers and Pharmacology

- B1** Write an essay on the consequences of acute and chronic stress on the hypothalamic-pituitary-adrenal axis.
- B2** Discuss the inositol signal transduction pathway and its role in cellular function.

Section C: Electrophysiology

- C1** Describe the principle and practice of patch clamp recording.
- C2** Discuss the physiology of two channel types based on your class research assignment.