

Ollscoil na hÉireann, Gaillimh
National University of Ireland, Galway

GX 2460

Semester I Examinations, 2003/2004

Exam Code(s)	2BO1/2BS1
Exam(s)	Fundamentals of Pharmacology 1
Module Code(s)	PM 203
Module(s)	
Paper No.	1
Repeat Paper	Special Paper
External Examiner(s)	Professor Iain Campbell
Internal Examiner(s)	Dr. J.M. O'Donnell
	Dr. A. Harkin
	Ms. L. Horrigan

Instructions:

Time allowed TWO hours.
Answer FOUR questions.

Duration	2 Hrs
No. of Answerbooks	1,4

Requirements:

Handout	
MCQ	
Statistical Tables	
Graph Paper	
Log Graph Paper	
Other Material	

No. of Pages	2
Department(s)	Pharmacology

OLLSCOIL NA hÉIREANN
COLÁISTE NA hOLLSCOILLE, GAILLIMH
SEMESTER 1 EXAMINATION, 2003
2nd Year B.Sc.

PM 203

Professor Iain Campbell

Dr. J.M. O'Donnell

Dr. A. Harkin

Ms. L. Horrigan

Time allowed: **TWO** hours

Answer **FOUR** questions

1. Explain briefly what is meant by the terms *specificity*, *affinity*, *efficacy* and *potency* in respect of drugs. Describe how an experiment could be performed to distinguish between a competitive and a non-competitive antagonist drug.
2. What is meant by the term structure activity relations (SAR)? Describe how SAR may be studied experimentally by the "inferential method". Illustrate your answer using any *one* of the following: acetylcholine, morphine, cortisol.
3. Describe phases 1 and 2 of drug metabolism and the role they play in drug elimination.
4. Discuss the effects of pH on the ability of drugs to cross biological membranes.
5. Explain why ion channels are considered to be useful drug targets.
6. Outline the desirable properties of a novel drug and discuss the various *clinical stages* associated with its development.