

Ollscoil na hÉireann, Gaillimh
National University of Ireland, Galway

Semester II Examinations, 2003/2004
Front Page Template

Exam Code(s)	2BS121
	2BO121
Exam(s)	2 nd Science
Module Code(s)	PM204
	Fundamentals of Pharmacology II
Module(s)	
Paper No.	1
Repeat Paper	Special Paper
External Examiner(s)	Professor I. Campbell
Internal Examiner(s)	Dr. J.M. O'Donnell
	Dr. M. Grealy
	Dr. J.P. Kelly

Instructions:

Answer 4 questions. Please use separate answer books for each question.

Duration	2 Hrs.
No. of Answer books	4

Requirements:

Handout	
MCQ	
Statistical Tables	
Graph Paper	
Log Graph Paper	
Other Material	

No. of Pages	2
Department(s)	Pharmacology

PM204 2nd year Pharmacology, Semester 2

1. With the aid of labelled diagrams, describe the structure and function of the G-protein coupled receptor (adenylate cyclase-linked). List *three* G-protein coupled receptors, and for each receptor identify the naturally occurring ligand, along with an example of an agonist and an antagonist of each receptor.
2. Describe the biosynthesis and the intracellular mechanism of action of nitric oxide (NO). Outline the varied biological roles NO plays and the actions of drugs that modulate NO availability
3. Write an essay on muscarinic cholinergic agonists and antagonists.
4. Using specific examples, discuss the effects of direct-acting adrenergic receptor agonists.
5. Write an essay on histamine. Include its biosynthesis, role in inflammation and allergy, receptor subtypes, and antagonists.
6. With the aid of diagrams describe the signalling that follows receptor mediated activation of phospholipase C. Name two neurotransmitters that use this signalling pathway, and state the receptor subtypes involved.