

Semester I Examinations, 2003/2004
Front Page Template

Exam Code(s)	3 MB2
Exam(s)	3 rd Medical
Module Code(s)	NS410
Module(s)	Neuroscience Neurophysiology
Paper No.	1
Repeat Paper	Special Paper
External Examiner(s)	Dr. D. Marples
Internal Examiner(s)	Prof. M.T. Kane, Dr. K. Doyle Dr. L. Quinlan

Instructions:

Duration	Candidates must answer 3 questions out of 4
No. of Answer books	1.5 hours
	3

Requirements:

Handout
MCQ
Statistical Tables
Graph Paper
Log Graph Paper
Other Material
No. of Pages	1 (2 including front page template)
Department(s)	Physiology

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NATIONAL UNIVERSITY OF IRELAND, GALWAY
3rd Medical Examination
Winter 2003

NS410 Neuroscience

Paper 1: Neurophysiology

Examiners: Dr. D. Marples, Prof. M.T. Kane, Dr. K. Doyle and Dr. L. Quinlan

Time Allowed: 1.5 Hours.

Candidates must answer 3 questions out of 4.

1. Write short notes on TWO of the following:
 - (a) Synaptic transmission in the CNS
 - (b) Pain perception and pathways in the body
 - (c) Discuss a cutaneous somatosensory receptor of your choice under the following headings: (i) adequate stimulus, (ii) transduction, (iii) adaptation, (iv) information coding, (v) sensory pathway
2. Write short notes on two of the following
 - (a) Briefly compare the effects of the sympathetic and parasympathetic systems on the following organs: (i) the heart and (ii) the eye
 - (b) Briefly compare the effects of the sympathetic and parasympathetic systems on the following organs: (i) the airways in the lungs and (ii) the gastrointestinal tract
 - (c) Discuss the hypothalamic control of eating.
3. Write short notes on TWO of the following:
 - (a) The withdrawal reflex
 - (b) Functional divisions of the cerebellum
 - (c) The blood brain barrier
4. Write short notes on TWO of the following:
 - (a) The visual pathway from the optic nerve to the lateral geniculate nucleus
 - (b) Sensing sound frequencies in the Organ of Corti
 - (c) Brain areas involved in language