

Ollscoil na hÉireann, Gaillimh
National University of Ireland, Galway
Semester II Examinations, 2003/2004

GX 2538

Front Page Template

Exam Code(s) 1OT1
Occupational Therapy

Module Code(s) SI102-1

Module(s) Physiology

Paper No.
Repeat Paper Special
Paper

External Examiner(s) Dr. D. Marples

Internal Examiner(s) Prof. M. Kane, Dr. K. Doyle

Dr. A. Henry, Dr. L. Quinlan

Instructions: Candidates must answer 5 questions out of 6

Duration Three hours
No. of Answer books 1

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
1st Occupational Therapy 1OY1
Summer 2004

Physiology SI102

Examiners: Dr. D. Marples, Prof. M. Kane, Dr. A. Henry, Dr. L. Quinlan

Time Allowed: Three Hours.

Candidates must answer 5 questions. Each Question is worth equal marks.

- Q.1** Describe the generation of a nerve action potential and how it travels along a myelinated neuron.
- Q.2** Write short notes on 2 of the following:
(a) Lung volumes (4 of each) and Capacities (4 of each)
(b) The difference between lung compliance and lung elasticity and the potential effect of disease on each of these.
(c) The Haldane effect and the Bohr effect.
- Q.3.** Explain concisely how changes in blood volume can affect blood pressure. What would you expect would be the effects of (i) dehydration, (ii) excessive secretion of aldosterone and (iii) treatment with diuretics on blood pressure?
- Q.4** Explain how the spread of electrical activity throughout the heart gives rise to the 5 waves of the ECG. Draw and label a diagram for a human ECG which illustrates the situation of premature (extra) systole and compensatory pause.
- Q.5** Write an essay on the hormones released by the adrenal cortex.
- Q.6** Discuss the role played by the endocrine system in calcium homeostasis