

National University of Ireland, Galway
Ollscoil na hÉireann, Gaillimh

WINTER EXAMINATIONS 2005

Third Year Medicine (3MB2)

BIOCHEMISTRY (BI 410)

Time Allowed: Three Hours

N.B. Please use a separate answer book for each question.

Write on any **five** of the following:

1. Outline the role of dietary habits in the development of obesity and describe appropriate dietary guidelines for the treatment of obesity.
2. Write an essay on 'Viral Respiratory Tract Infections' with particular reference to influenza and severe acute respiratory syndrome (SARS).
3. Write an essay on 'Innate Immunity' or 'Cell-mediated Immunity'.
4. Discuss how caspases are involved in apoptosis.
5. Discuss **two** of the following:
 - a) The Nuclear Receptor Superfamily
 - b) Non-genomic Actions of Sex Steroid Hormones
 - c) Nuclear Receptor Co-regulator Functions
6. 'Atherosclerosis is an Inflammatory Disease'. Explain.
7. Describe the role of tumour suppressor genes in cancer.
8. Write an essay on **either** cholinergic receptors **or** long-term potentiation (LTP).