

National University of Ireland, Galway  
Ollscoil na hÉireann, Gaillimh

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SPRING EXAMINATIONS 2002

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Third Year Medicine (3MB 242)

BIOCHEMISTRY (BI 410)

Time Allowed:

Three hours

Write on any five (5) of the following:-

- 1 Compare and contrast innate and acquired immunity.

**OR**

Outline the mechanisms by which immunoglobulins can bring about the death of 'foreign' cells, stating which immunoglobulins are most effective in this respect.

2. Write an essay on influenza viruses.
3. Compare and contrast the structures and functions of haemoglobin and myoglobin.
4. Describe the methods by which the nutritional status of a hospital patient may be measured
5. Write an essay on **either** GABA receptors **or** adrenergic receptors.
6. "Apoptosis and necrosis are two distinct modes of cell death". Discuss this statement with clear reference to the biochemical and morphological features of these modes of cell death.
7. 'Single gene defects are a significant cause of human genetic disease'. Discuss, giving at least **three** specific examples.
8. Discuss the metabolism of vitamin D and its role in the control of calcium release from bone tissue.