

**NATIONAL UNIVERSITY OF IRELAND, GALWAY**  
**Ollscoil na hÉireann, Gaillimh**

Summer Examinations, 2002 - Honours  
B.Sc. and B.Sc. (Biomedical Science) Degree Examinations  
**BIOCHEMISTRY (BI401)**

*Fourth Paper*

Extern Examiner: Dr. D.K. Apps

Time allowed: *Three* Hours

Write critical essays on **three** of the following topics. Please start each topic with a new answer book and clearly indicate the number and title on the front.

1. Eicosanoids.
2. Directed evolution/engineering of proteins.
3. Antimicrobial peptides.
4. Photosynthetic reaction centres.
5. Antifreeze proteins.
6. Origins of human virus diversity.