

**CORK INSTITUTE OF TECHNOLOGY**  
**INSTITIÚID TEICNEOLAÍOCHTA CHORCAÍ**

**Semester 1 Examinations 2010/2011**

<b>Module Title:      Pharmaceutical Microbiology</b>
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**Module Code:** BIOM 8002

**School:** School of Science

**Programme Title:** BSc (Hons) Nutrition & Health Science  
BSc (Hons) Pharmaceutical Biotechnology

**Programme Code:** CR\_SNHSC\_8\_Y4  
CR\_SPHBI\_8\_Y4

**External Examiner(s):** Dr. J Bird  
Dr A Gallagher

**Internal Examiner(s):** Dr. D. Gilroy

**Instructions:** Answer THREE Questions. All questions have equal marks.

**Duration:** 2 Hours

**Sitting:** Winter 2010

**Requirements for this examination:**

<p><b>Note to Candidates:</b> Please check the Programme Title and the Module Title to ensure that you have received the correct examination paper. If in doubt please contact an Invigilator.</p>
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- Q1. Disruption of bacterial quorum sensing has been suggested as a new anti-infective strategy. Discuss this statement in detail, outlining the potential and limitations of this approach.  
(20 marks)
- Q2. Describe the mode of action of **three** classes of antibiotics.  
(20 marks)
- Q3. Using examples of your choice, distinguish between inherent and acquired resistance mechanisms in bacteria.  
(20 marks)
- Q4. Write notes on **two** of the following antimicrobial agents;  
- Antiviral  
- Antiprotozoan  
- Antifungal  
(20 marks)
- Q5. Discuss strategies used for testing disinfectants.  
(20 marks)