

CORK INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA CHORCAÍ

Semester 1 Examinations 2011/2012

Module Title: Pharmacology

Module Code: CHEM8005

School: Science & Informatics

Programme Title: BSc (Honours) in Herbal Science – Year 3
BSc (Honours) in Biomedical Science – Year 3

Programme Code: SHERB_8_Y3
SBISC_8_Y3

External Examiner(s): Dr Julia Green, Prof Richard O’Kennedy
Internal Examiner(s): Ms Anna-Maria Keaveney

Instructions: Answer QUESTION 1 and TWO other questions.

Duration: 2 hours

Sitting: Winter 2011

Requirements for this examination:

Note to Candidates: 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.

- Q1. Describe the following in detail in relation to the clinical effect: **(50 marks)**
- (a) Dose response curves
 - (b) Potency and efficacy
 - (c) Receptor occupancy V's effect
 - (d) Agonists.
 - (e) Antagonists
- Q2. Discuss in detail **(25 marks)**
- 1. The pharmacokinetics of the one compartment model.
 - 2. The additional factors that are addressed by the two compartment model
- Q3. Describe in detail the pharmacology of Adrenergic Neurotransmission. **(25 marks)**
- Q4. Describe in detail **(25 marks)**
- 1. The effect of phase 1 and phase 2 metabolism on drugs/ herbs.
 - 2. The effect of drug/ herb metabolism on toxicity
- Q5. Discuss the factors that can affect the duration of a drug/ herb action. **(25 marks)**