

CORK INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA CHORCAÍ

Autumn Examinations 2012/2013

Module Title: Pharmacology

Module Code: CHEM8005

School: Science

Programme Title: BSc (Hons) Herbal Science – Year 3

Programme Code: SHERB_8_Y3

External Examiner(s): Dr Julia Green
Internal Examiner(s): Ms Anna-Maria Keaveney

Instructions: **Answer QUESTION 1 and TWO other questions.**

Duration: 2 hours

Sitting: Autumn 2013

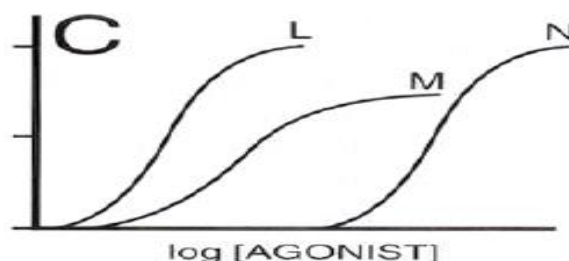
Requirements for this examination:

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.

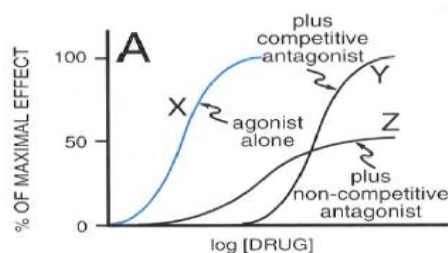
Q1. Describe the following in detail in relation to the clinical effect: **(50 marks)**

(a) The effect of drug-receptor interactions

(b) What is happening in the graph below



(c) Answer the following questions in relation to the graph below



A. Give a definition (plus example) of a competitive antagonist

B. Give a definition (plus example) of a non-competitive antagonist

C. Explain in detail the mechanistic basis for the graph above

(d) Effect of the volume of distribution on a drug

(e) The factors affecting renal excretion and give examples to illustrate your answer

Q2. Discuss in detail the factors that affect the susceptibility of various body organs to drugs/ toxic compounds. Include examples in your answer. **(25 marks)**

Q3. Describe in detail the effect of metabolism on a drug using examples to illustrate your answer **(25 marks)**

Q4. Discuss in detail cell signalling in the body giving specific examples **(25 marks)**