



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2011/2012

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE
(ENVIRONMENTAL HEALTH)

HEH 404: INTRODUCTION TO PHARMACOLOGY

DATE: Wednesday 28th March, 2012

TIME: 2.00 p.m. – 4.00 p.m.

INSTRUCTIONS

This paper consists of TWO sections;

Section A (SAQs) - 20 marks

Section B (Essay) - 50 marks

Section A – Answer ALL questions in this Section.

Section B – Answer question 5 and any other TWO questions in this section.

SECTION A - (5 marks per question)

1. Define the following terms as used in pharmacology; [5 marks]
 - a) Placebo
 - b) Therapeutic window
 - c) Drug target
 - d) Generic name
 - e) Contraindication
2. Two drugs A and B act at the same receptor, but A is fairly safe to use while B is very toxic. Sketch and explain the dose-response curves you would expect for the two drugs. [5 marks]
3. Describe how drug-drug interactions can occur through metabolism. [5 marks]
4. Explain the concept of therapeutic drug monitoring. [5 marks]

SECTION B

Answer question FIVE (5) and any other TWO questions in this Section.

5. a) State the different sources of drugs. [5 marks]
b) Describe the process of drug development, from discovery to use by patients. [15 marks]
6. Discuss the various types of irrational drug use and how they can be controlled. [15 marks]
7. a) Explain the significance of zero elimination kinetics for drugs. [5 marks]
b) Classify adverse drug reactions. Provide an example of each type of reaction. [10marks]
8. a) Explain how a drug produces its pharmacological effect at the molecular level. [5 marks]
b) Describe the various types of drug antagonism. [10 marks]

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