



**KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2011/2012**

**INSTITUTION BASED PROGRAMME (DECEMBER SESSION)
EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE
(ENVIRONMENTAL HEALTH)**

HEH 404: INTRODUCTION TO PHARMACOLOGY

DATE: FRIDAY, 4TH MAY 2012

TIME: 8.00 A.M. – 10.00 A.M.

INSTRUCTIONS:

The 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. State the different types of names that may be used for the same drug. (5 marks)
2. Use dose-response curves to distinguish between drug efficacy and potency. (5 marks)
3. Explain why covalent binding of drug to receptors is NOT desirable in most conditions but is desirable in some types of diseases. (5 marks)
4. Using a drug example, explain the significance of genetic polymorphism of drug metabolizing enzymes. (5 marks)

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

5.
 - a) Describe FIVE routes of drug administration and in each case state ONE type of dosage form that may be used. (10 marks)
 - b) Outline the factors that influence drug bioavailability. (10 marks)
6. Discuss how irrational drug use may arise. (15 marks)
7.
 - a) Describe the mechanisms involved in renal excretion of drugs. (10 marks)
 - b) Explain the mode of action of probenecid in prolonging the duration of action of penicillins. (5 marks)
8.
 - a) Classify poisons based on origin. (5 marks)
 - b) Outline the general principles of management of poisoning. (10 marks)
