



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR
THIRD YEAR FIRST SEMESTER**

**SCHOOL OF NATURAL RESOURCES AND
ANIMAL SCIENCES**

**BACHELOR OF ANIMAL HEALTH AND
PRODUCTION**

COURSE CODE: AHP 3105-1

**COURSE TITLE: PHARMACOLOGY AND
TOXICOLOGY**

DATE: 6/12/ 2023

TIME: 1430 -1630 HRS

INSTRUCTIONS TO CANDIDATES

Answer **ALL** questions.

This paper consists of 2 printed pages. Please turn over.

Answer all questions (100 Marks)

1. a) Define the following terms:

- i) Toxicology (2 marks)**
- ii) Pharmacokinetics (2 marks)**
- iii) Pharmacodynamics (2 marks)**
- iv) Efficacy (2 marks)**
- v) Anthelmintic (2 marks)**
- vi) Potency (2 marks)**
- vii) Bacteriostatic (2 marks)**
- viii) Bactericidal (2 marks)**
- ix) Chemotherapy (2 marks)**
- x) LD₅₀ (2 marks)**

2. Explain factors that influence the choice of routes of drug administration. **(20 marks)**

3. a) Discuss pharmacokinetics of 2 named drug as examples. **(10 marks)**

b) Distinguish various mechanisms of antimicrobial action. **(10 marks)**

4. a) Describe antimicrobial resistance, giving its importance. **(5 marks)**

b) Explain the development of antimicrobial resistance. **(10 marks)**

c) Explain the importance of drug antagonism. **(5 marks)**

5. a) Explain the various mechanisms of action of anthelmintics. **(10 marks)**

b) Give the strategies for control of anthelmintic resistance. **(10 marks)**

6. Describe Penicillins under the following headings. **(2.5 marks each)**

- a. Source
- b. Chemical structure
- c. Mechanism of action
- d. Resistance
- e. Pharmacokinetics
- f. Spectrum of activity
- g. Routes of administration
- h. Toxicity

/END/