FACULTY OF NATURAL RESOURCES MANAGEMENT AND AGRICULTURE

DEPARTMENT OF ANIMAL PRODUCTION AND HEALTH

VETERINARY DIAGNOSTICS AND PHARMACOLOGY

NAP2204

FIRST SEMESTER

JUNE 2026 EXAM

This examination paper consists of 2 pages

Time Allowed:	**3 hours**
Total Marks:	**100**
Special Requirements:	**None**
Examiner's Name:	**Dr L. Maposa**

INSTRUCTIONS

1. Answer **all** questions in Section A
2. Answer **two** questions in Section B
3. Each question carries 20 marks

MARK ALLOCATION

QUESTION	**MARKS**
SECTION A	**60**
SECTION B	**40**
TOTAL ATTAINABLE MARKS	**100**

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SECTION A: ANSWER ALL QUESTIONS.

QUESTION 1

a) Describe the step-by-step procedure for conducting a clinical examination in an animal **[12 marks]**

b) What is your understanding of the following terms:

i) Postmortem Examination **[2 marks]**
ii) Diagnostic Samples **[2 marks]**
iii) Haemolysis **[2 marks]**
iv) Urinalysis **[2 marks]**

QUESTION 2

a) Write notes on the following as they relate to veterinary drugs:

i. Pharmacokinetics. **[3 marks]**
ii. Pharmacodynamics. **[2 marks]**
iii. Therapeutics. **[2 marks]**
iv. Generic name. **[3 marks]**

b) Describe five (5) routes by which a veterinary drug can be administered. **[10 marks]**

QUESTION 3

a) What is your understanding of the term Pharmacology? **[4 marks]**

b) Describe the following principles as they relate to veterinary drugs, including factors that influence the rate of each process:

i) Absorption **[4 marks]**
ii) Distribution **[4 marks]**
iii) Metabolism **[4 marks]**
iv) Excretion **[4 marks]**

SECTION B: ANSWER ANY TWO QUESTIONS.

QUESTION 4

a) What is your understanding of antimicrobial resistance (AMR)? **[4 marks]**
b) Discuss the main causes of antimicrobial resistance. **[6 marks]**
c) What methods can be used to mitigate AMR in the poultry sector? **[10 marks]**

QUESTION 5

a) Discuss the factors that influence the rate of drug metabolism in animals. **[10 marks]**
b) Briefly describe five routes of drug administration in domestic animals. **[10 marks]**

QUESTION 6

a) What is your understanding of diagnostic imaging? **[6 marks]**
b) Discuss the application, advantages, and disadvantages of radiography. **[14 marks]**

END OF EXAMINATION