

**GWANDA STATE UNIVERSITY**



**FACULTY OF NATURAL RESOURCES MANAGEMENT AND AGRICULTURE**

**DEPARTMENT OF ANIMAL PRODUCTION AND HEALTH**

**BACHELOR OF SCIENCE HONOURS DEGREE IN ANIMAL SCIENCE**

**ANIMAL HEALTH AND WELFARE (SUPPLEMENTARY)**

**NAP 2101/LAS 2201**

**FIRST/SECOND SEMESTER FINAL EXAMINATION PAPER**

**APRIL 2024**

This examination paper consists of 3 pages

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

**INSTRUCTIONS**

1. Answer **all** questions in Section A
2. Answer **two** questions in Section B

**MARK ALLOCATION**

<b>QUESTION</b>	<b>MARKS</b>
SECTION A	60
SECTION B	40
<b>TOTAL ATTAINABLE MARKS</b>	<b>100</b>

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## SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION

### Question 1

- a) Define the following terms as used in animal health and welfare:
- i. Abortion; [ 1 mark ]
  - ii. Haemoglobinuria; [ 1 mark ]
  - iii. Hypertrophy; [ 1 mark ]
  - iv. Splenomegaly; [ 1 mark ]
  - v. Stomatitis; [ 1 mark ]
  - vi. Necrosis; [ 1 mark ]
  - vii. Pathogenicity; and [ 1 mark ]
  - viii. Congestion. [ 1 mark ]
- b) List five zoonotic diseases that you covered in this module. [ 5 marks ]
- c) Present to the farmer the clinical signs of Botulism disease in cattle? [ 7 marks ]

### Question 2

Write an essay on heart water in cattle under the following subheadings:

- a) Clinical signs; [10 marks]
- b) Treatment; and [2 marks]
- c) Prevention and control. [3 marks]
- d) One of his animal weighs 450 kg. In his drug stock he has Hitet 120. One of the instructions reads as follows: Hi-tet 120 is lipid soluble and penetrates tissue well. For anaplasmosis and heart water it may be used at 1 ml per 15 kg and repeated daily as required. For other infections it may be used at a rate of 1 ml per 30 kg daily for 4 days. Hi-tet 120 may be administered by intramuscular or intravenous routes and has a meat withdrawal period of 28 days and a milk withdrawal of 4 days.
- i) Calculate the amount of drug that could be administered to this animal. [3 marks]
  - ii) The farmer was to sell this animal to butcher man who will slaughter it 10 days after drug administration. What advice would you give the farmer? [2 marks]

### Question 3

- i. What are typical signs of internal parasitism in livestock? [8 marks]
- ii. State the clinical signs of *Lantana camara* poisoning in a cow. [10 marks]
- iii. State four methods that could be used for determining the volume of a diptank. [2 marks]

### SECTION B: ANSWER ONLY TWO QUESTIONS IN THIS SECTION

#### Question 4

An emerging beef farmer in Insiza District requests your assistance in drafting a programme to control ticks. He uses the plunge dip for his animal. However the farmer does not know the capacity/volume of his tank. He has the following measurements. Top length is 1000cm, bottom length is 600 cm, Top width is 100 cm, bottom width is 60cm and depth of the tank was 200 cm. The farmer uses Ektoban as an acaricide. He applies 25 litres of the acaricide as a fresh fill. The mixing ratio is 15ml: 10 litres.

- a) Advise the farmer if he is applying the correct quantity. In your answer show him how you calculated the volume/capacity of the diptank and the amount of the acaricide needed. [14 marks]
- b) What are the effects applying 25 litres into the dip tank? [ 3 marks]
- c) Advise the farmer how he should have effective dipping in his farm. [ 3 marks]

#### Question 5

- a) Discuss three types of animal welfare inputs. [10 marks]
- b) Discuss the difference between Animal conservation and Animal welfare. [10 marks]

#### Question 6

- a) Discuss the possible treatment and control of Swine erysipelas. [10 marks]
- b) What are the major control strategies of Tuberculosis? [ 8 marks]
- c) What do you use for treating Foot and Mouth Diseases in cattle? [ 2marks]

**END OF QUESTION PAPER**