GREAT ZIMBABWE UNIVERSITY

ROBERT MUGABE SCHOOL OF EDUCATION AND CULTURE

DEPARTMENT OF SCIENCE AND TECHNICAL EDUCATION

B.ED (SECONDARY) IN SERVICE HONOURS DEGREE PART 2 SEMESTER 1

ANIMAL HEALTH **TPAG/TSAG 212-3**

YEAR **2025**

TIME **3 HOURS**

MAIN PAPER

INSTRUCTIONS TO CANDIDATES

- Answer **three** questions only
- All questions carry equal mark

1. Discuss Newcastle disease under the following headings:

i. Causative agent [2]

ii. Transmission [5]

iii. Clinical signs [8]

iv. Treatment [5]

v. Prevention and control [3]

Q2. (a) Differentiate between an antigen and antibody [6]

(b) Describe the functions of the following body components on the immune system of an animal;

i. Tonsils [5]

ii. Lymphatic vessels and lymph nodes [5]

iii. Spleen [5]

iv. Bone marrow [4]

Q3. Using examples, describe any five (5) disease control methods in farm animals. [25]

Q4. (a) You have been recently employed by the Department of Veterinary Services, then you meet a group of newly resettled farmers. One of the farmers reports that he vaccinated his cattle against blackleg disease 24 days ago but some of the cattle in his herd are showing clinical signs of blackleg disease. Discuss with the farmers the possible causes of vaccine failure in this case? [10]

b) There is an increase in the antimicrobial resistance (AMR) in livestock disease control. Discuss the possible causes of AMR. [10]

c) Compare vaccination with treatment as they are used in disease management [5]

Q5. (a) Discuss *Lanatana camara* poisoning in cattle under the following headings:

i. Clinical signs. **[4]**

ii. Post mortem findings. **[6]**

(b) Ketosis is a metabolic disorder that mainly affect cattle. Discuss the causes and clinical signs of Ketosis. **[10]**

(c) Describe adaptive immunity in livestock **[5]**

END OF EXAMINATION