



**2<sup>ND</sup> SEM. 2004/2005**

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**UNIVERSITY OF SWAZILAND  
SUPPLEMENTARY EXAMINATIONS**

**PROGRAMME: DIPLOMA IN AGRICULTURE YEAR 2  
DIPLOMA IN AGRICULTURAL EDUCATION YEAR 2**

**COURSE CODE: APH 204**

**TITLE OF PAPER: INTRODUCTION TO ANIMAL HEALTH AND HYGIENE**

**TIME ALLOWED: TWO (2) HOURS**

**INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS**

**DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY  
THE CHIEF INVIGILATOR.**

**QUESTION ONE**

- a. Explain how the environmental factors of climate, vectors and management could influence the occurrence of infectious diseases among farm animals. 10 Marks
- b. Describe how a farm animal attains specific resistance (immunity). 10 Marks
- c. Give an account and examples of each of the two main types of immunity that can be attained in a farm animal. 5 Marks

**QUESTION TWO**

- a. You have carried out a clinical examination of a cow weighing 250 kg and have come up with a tentative diagnosis that it could be infested with round worms. Describe how you would go about confirming your tentative diagnosis. 5 Marks
- b. After confirming that the cow is infested with round worms, you have decided that you will use the anthelmintic **Noromectic** containing **10,000 ug/ml** of the active ingredient **Ivermectin** at a dosage of **200 ug/kg** of body weight of the cow given by subcutaneous route. Calculate, showing all your work, how many ml of this anthelmintic you will give to this cow. 10 Marks
- c. Describe how strongyle round worms are transmitted and controlled in cattle. 10 Marks

**QUESTION THREE**

- a. Describe how the one-host tick *Boophilus decoloratus* (the blue tick) transmits protozoan blood parasite *Babesia bigemina* in cattle and name the disease the parasite causes in cattle. 10 Marks
- b. On a cattle ranch in the Lowveld of Swaziland, a newly constructed dip tank has just been calibrated to a capacity of 12,000 litres. After serious consultations, it has been decided to use the dip chemical **Tactic TR (Total Replenishment)** for a **conventional type** of dipping. Describe how fresh filling at a dilution rate of 1 kg of **Tactic TR** per 5000 litres of water, the first dipping and the subsequent replenishments and dipping of the cattle would be carried out. 15 Marks

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#### QUESTION FOUR

- a. Describe the routine measures you would use to control the spread of common diseases among dairy calves on a large dairy farm in Southern Africa. 20 Marks
- b. Explain the importance of diseases of dairy calves on a large dairy farm in Southern Africa. 5 marks

#### QUESTION FIVE

- a. Describe how mange is transmitted among goats in Southern Africa. 10 Marks
- b. Give an account of the routine measures used to control the transmission of mange in goats in Southern Africa. 10 Marks
- c. Explain the economic importance of mange among goats in Southern Africa. 5 Marks

#### QUESTION SIX

Describe how the disease condition mastitis is spread and controlled among cows in a large milking herd in Southern Africa. 25 Marks