



MACHAKOS UNIVERSITY

University Examination For 2024/2025 Academic Year

SCHOOL OF AGRICULTURE, ENVIRONMENT AND HEALTH SCIENCES

DEPARTMENT OF AGRICULTURAL SCIENCES

THIRD YEAR FIRST SEMESTER EXAMINATION FOR
BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION

AHE 300: ANIMAL HEALTH AND DISEASES

DATE: 22ND JANUARY, 2025

TIME: 11.00 AM – 1.00 PM

INSTRUCTIONS:

Answer question ONE and any other TWO questions

QUESTION ONE - COMPULSORY (30 MARKS)

- a) Explain the concepts prevention, control and treatment as applied in animal health (6 marks)
- b) Outline five signs that are observed in healthy goats (5 marks)
- c) Explain the process how a virus infects a host leading to development of a disease (5 marks)
- d) Explain three forms of rabies disease signs in livestock (9 marks)
- e) Explain five reasons why livestock should be kept healthy always (5 marks)

QUESTION TWO (20 MARKS)

- a) Explain five physiological systems in a cow and name one component organ in each system (10 marks)
- b) Discuss the principle behind vaccination in livestock (6 marks)
- c) Explain four cardinal signs of inflammation (4 marks)

QUESTION THREE (20 MARKS)

- a) Discuss pediculosis under the following subheadings:
- i. Etiology (2 marks)
 - ii. Transmission (2 marks)
 - iii. Species affected (2 marks)
 - iv. Clinical signs (2 marks)
 - v. Diagnosis (2 marks)
- b) Discuss flea allergy dermatitis (FAD) under the following subheadings:
- i. Etiology (2 marks)
 - ii. Species affected (2 marks)
 - iii. Pathogenesis (4 marks)
 - iv. Clinical signs (2 marks)

QUESTION FOUR (20 MARKS)

- a) Explain how ticks cause injury to a cow (5 marks)
- b) Discuss the chemical methods of tick control in livestock (5 marks)
- c) Discuss East Coast Fever (ECF) disease under the following subheadings
- i. Etiology (2 marks)
 - ii. Species affected (1 mark)
 - iii. Transmission (2 marks)
 - iv. Clinical signs (3 marks)
 - v. Diagnosis (2 marks)

QUESTION FIVE (20 MARKS)

- a) Discuss Ringworms infection under the following subheadings
- i. Species affected (2 marks)
 - ii. Transmission (2 marks)
 - iii. Clinical signs (2 marks)
 - iv. Diagnosis (2 marks)
 - v. Treatment (2 marks)
- b) Explain TEN methods of controlling anthrax disease in livestock (10 marks)