



MACHAKOS UNIVERSITY
University Examinations for 2022/2023 Academic Year

SCHOOL OF AGRICULTURE, ENVIRONMENT AND HEALTH SCIENCES
DEPARTMENT OF AGRICULTURAL SCIENCES
THIRD YEAR FIRST SEMESTER EXAMINATION FOR
BACHELOR OF SCIENCE (AGRICULTURAL EDUCATION AND EXTENSION)
AHE 300: ANIMAL HEALTH AND DISEASES

DATE:

TIME:

INSTRUCTIONS:

Answer question ONE and any other TWO questions

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Differentiate the terms prevention, control and treatment as applied in animal health (3 marks)
- b) Explain four macroscopic features observed when examining whether cow urine or feces are normal (2 marks)
- c) Explain any four tick-borne diseases of cattle. (2 marks)
- d) Explain five signs that are observed in healthy goats (2.5 marks)
- e) Explain the process how a virus infects a host leading to development of a disease (3 marks)
- f) Explain the strategic control of helminths in livestock. (3 marks)
- g) Explain three forms of rabies disease signs in livestock (6 marks)
- h) Explain five reasons why livestock should be kept healthy always (2.5 marks)
- i) Explain three ways how flies contribute to disease spread in livestock (3 marks)
- j) Describe four vital parameters checked during examination of animals (2 marks)
- k) Name any two diseases that cause pox lesions in livestock. (1 mark)

QUESTION TWO (20 MARKS)

- a) Describe five physiological systems in a cow and name one component organ in each system (10 marks)
- b) Discuss the principle about 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 five ways how ticks cause injury to livestock (5 marks)
- b) Discuss five 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)