



# MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 – Meru-Kenya

Tel: +254(0) 799 529 958, +254(0) 799 529 959, + 254 (0) 712 524 293,

Website: [info@must.ac.ke](http://info@must.ac.ke) Email: [info@must.ac.ke](mailto:info@must.ac.ke)

---

## University Examinations 2024/2025

### SECOND YEAR FIRST SEMESTER EXAMINATION FOR CERTIFICATE IN ANIMAL HEALTH AND PRODUCTION

#### AAP 1214: METABOLIC DISORDERS

**DATE: JANUARY 2025**

**TIME: 1½ HOURS**

---

#### INSTRUCTIONS:

*Answer question **ONE** and any other **TWO** questions*

---

#### QUESTION ONE (30 MARKS)

- a) Define the term metabolic disorder (2 marks)
- b) List the clinical manifestations of salt poisoning in farm animals (5 marks)
- c) Discuss the predisposing factors of diabetes in dogs (5 marks)
- d) List the clinical manifestations of hypoglycemia in cattle (6marks)
- e) Discuss the clinical manifestations of urea poisoning in sheep (6 marks)
- f) Define differential diagnosis and name five differential diagnosis of parturient paresis (6 marks)

#### QUESTION TWO (15 MARKS)

- a) Discuss the pathogenesis of lactic acidosis (7 marks)
- b) Discuss the pathogenesis of pregnancy toxemia in ewes (8 marks)

### **QUESTION THREE (15 MARKS)**

Discuss Hypocalcemia under the following subheadings

- i. Pre-disposing factors (2 marks)
- ii. Pathogenesis (4 marks)
- iii. Clinical manifestations (5 marks)
- iv. Treatment options (2 marks)
- v. Prevention and control measures (2 marks)

### **QUESTION FOUR (15 MARKS)**

In a dairy farm, a farmer reports having five calves out of 10 voiding bloody urine after exposure to a water source where they drink ad libitum after a long period of restriction

- i. Outline the questions you would ask during history taking to aid in diagnosis (3 marks)
- ii. List the differential diagnosis of the case (3 marks)
- iii. Name the tentative diagnosis (2 marks)
- iv. Discuss the treatment options for the tentative diagnosis (3 marks)
- v. Discuss the pathogenesis of the tentative diagnosis (4 marks)