

**CHUKA**



**UNIVERSITY**

---

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF  
CERTIFICATE IN ANIMAL HEALTH AND PRODUCTION**

**ANHE 00125: METABOLIC, NUTRITIONAL AND REPRODUCTIVE DISEASES**

**STREAMS: CERT (ANHE)**

**TIME: 2 HOURS**

**DAY/DATE: MONDAY 05/08/2019**

**2.30 PM – 4.30 PM**

---

**INSTRUCTIONS:**

**SECTION A: ATTEMPT ALL QUESTIONS (40 MARKS)**

1. Outline the causes of iron deficiency and the clinical manifestations in animals? [5 marks]
2. Briefly discuss grain overload under the following:
  - (a) What is grain overload? [1 mark]
  - (b) Clinical signs [4 marks]
3. Discuss bovine brucellosis under;
  - (a) Aetiology [1 mark]
  - (b) Clinical signs [4 marks]
4. Discuss piglet anemia under;
  - (a) Causes and predisposing factors [2 marks]
  - (b) Clinical signs [3 marks]
  - (c) Treatment [1 mark]
5. Discuss water intoxication under;
  - (a) Causes [1 mark]
  - (b) Clinical findings [3 marks]
  - (c) Treatment and control [2 marks]
6. Outline some non-infectious causes of infertility in cattle. [5 marks]

7. Briefly discuss Milk Fever in domestic animals under;
- (a) Clinical presentation of milk fever [5 marks]
  - (b) Treatment and prevention of milk fever [3 marks]

**SECTION B: ATTEMPT ANY TWO QUESTIONS (30 MARKS)**

8. Briefly discuss bloat under the following,
- (a) Causes primary bloat [5 marks]
  - (b) Clinical signs of bloat [5 marks]
  - (c) Treatment of primary bloat and secondary bloat. [5 marks]
9. Discuss copper deficiency in domestic animals under;
- (a) Role of copper in the body. [3 marks]
  - (b) Clinical signs of copper deficiency [5 marks]
  - (c) Role of Vitamin B complex in the body [3 marks]
  - (d) Clinical signs of vitamin deficiency in animals. [4 marks]
10. Discuss Bovine mastitis under;
- (a) Classification of mastitis [5 marks]
  - (b) Clinical presentation [5 marks]
  - (c) Treatment and prevention [5 marks]
-