

CHUKA



UNIVERSITY

[www.chuka.ac.ke](http://www.chuka.ac.ke)

**UNIVERSITY EXAMINATIONS**

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

**ANHE 00121: GENERAL PATHOLOGY**

**STREAMS:**

**TIME: 2 HOURS**

**DAY/DATE: WEDNESDAY 12/04/2023**

**2.30 P.M – 4.30 P.M**

---

**INSTRUCTIONS:**

**SECTION A: (40 MARKS)**

**ANSWER ALL THE QUESTIONS**

1. (a) Distinguish between the following:
  - (i) Icterus and anemia. [2 marks]
  - (ii) Apoptosis and necrosis. [2 marks]
  - (iii) Benign and metastatic tumor. [4 marks]
- (b) Enumerate pathological calcification. [4 marks]
2. (a) Describe the five cardinal signs of inflammation. [6 marks]
- (b) Enumerate any five predisposing factors to neoplasia. [5 marks]
- (c) Describe hypoxia and name three types of hypoxia. [4 marks]
3. (a) Explain how you determine that an animal is dehydrated. [4 marks]

(b) Explain five causes and types of atrophy. [5 marks]

(c) Explain four factors that cause a delay in wound healing. [4 marks]

**SECTION B (30 MARKS) ANSWER ANY TWO QUESTIONS**

4. A bovine carcass from the University farm has been brought for postmortem examination so as to determine the cause of death. The carcass had a foul smell.

(i) Discuss the probable explanation for the foul odor. [6 marks]

(ii) Further examination, the limbs of the carcass were stiff /rigid and upon opening the ventral abdomen had a bluish discoloration. Briefly explain what caused rigidity and discoloration. [9 marks]

5. Discuss the causes, types and effects of infarction in animals. [15 marks]

6. A farmer in Nithi called you to attend to a clinical case. One of her cows micturates red urine.

(i) Discuss how you will differentiate hematuria and hemoglobinuria using the urine sample. [8 marks]

(ii) Briefly explain the most probable causes of red urine. [7 marks]

-----