

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF  
SCIENCE IN PUBLIC HEALTH**

**PUHE 212: COMPARATIVE ANATOMY OF FOOD ANIMALS**

**STREAMS:**

**TIME: 2 HOURS**

**DAY/DATE: WEDNESDAY 07/07/2021**

**8.30 A.M. – 10.30 A.M.**

**INSTRUCTIONS:**

- **Answer ALL questions in Section A and any TWO in section B**

**SECTION A: 30 MARKS**

1. a) Define vestigial structures. (2 marks)  
b) Using directional terms, describe the relation of the liver to 4 visceral organs in the pig. (8 marks)
2. Distinguish the following
  - (a) Homologous and analogous structures (2 marks)
  - (b) Ox and goat kidneys. (2 marks)
  - (c) Superficial and deep lymph-nodes giving examples. (2 marks)
  - (d) Two types of penis found in domestic animals giving examples. (4 marks)
3. a) List seven types of bones giving examples of each. (7 marks)  
b) Compare the number and position of mammary glands of sheep and sow. (3 marks)

**SECTION B (40 MARKS)**

4. A) Name the joint and identify the structure indicated in the cranio-caudal view shown in Figure 1. (9 marks)

**Figure 1**

- b) Draw the bovine forelimb and name the bones and joints therein. (11 marks)
5. a) Discuss the anatomical differences in the integumentary system of goats and chicken. (8 marks)
- b) Describe the position and location of the bovine heart in relation to the neighboring structures. (10 marks)
- c) Name at least 4 muscles of mastication. (2 marks)
6. Draw the digestive system of poultry and cattle and compare their functional anatomy. (20 marks)
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