

CHUKA

UNIVERSITY



UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF
SCIENCE IN ANIMAL PRODUCTS PROCESSING TECHNOLOGY**

ANHE 451: PUBLIC HEALTH, ZONOSSES AND ENVIRONMENT

STREAMS: BSc.

TIME: 2 HOURS

DAY/DATE: TUESDAY 09/04/2024

8.30 A.M. – 10.30 A.M.

INSTRUCTIONS

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

SECTION A (30 Marks)

1. a) Define the following terms
 - i. Veterinary Public Health (2 Marks)
 - ii. Environmental Health (2 Marks)
 - iii. HACCP principle (1 Mark)
- b) Name any 5 microbial zoonoses associated with animal products stating how they can be prevented. (5 Marks)
2. a) Discuss 4 emerging challenges facing development of Veterinary Public Health in Kenya (4 Marks)
- b) Outline three practices that can be undertaken to prevent environmental contamination by animal products (3 Marks)
- c) Briefly describe how eggs may be examined for freshness (3Marks)
3. a) Briefly write short notes on antimicrobial residues in milk (6 Marks)
- b) Describe the characteristics of putrefied fish (4 Marks)

SECTION B (40 Marks)

4. A dairy farmer in Ndagani area sunk a borehole in his farm to sustain his dairy enterprise. He has brought a sample of water to the Chuka University lab for analysis
- a) Describe the properties of water you would propose for the analysis (16 Marks)
 - b) Discuss 'water' as a critical control point in dairy enterprises (4 Marks)
5. a) Jecinta has been employed at the Export Processing Zone, in the wool grading section for a period of six months. She recently developed blisters on the skin that are itchy and swollen. She also has a fever persistent cough and body aches.
- i. Provide a possible diagnoses for this condition (1 Mark)
 - ii. How is disease in 5 (a) diagnosed (5 Marks)
 - iii. Explain how this disease is treated (4 Marks)
 - iv. Discuss the methods used to control this disease (4 Marks)
- b) Discuss the prevention and control of Bovine Spongiform Encephalopathy (BSE) (6 marks)
- c) a. Using an illustration, discuss the effects of four environmental hazards on human health (12 Marks)
- b. As an animal products expert, discuss four measures that you can do to reduce negative impacts of animal products to the environment (4 Marks)
-