

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN FOOD
SCIENCE AND TECHNOLOGY**

ANPT 231: MEAT QUALITY

STREAMS: ANPT

TIME:2HOURS

DAY/DATE: THURSDAY 13/04/2023

2.30 P.M. –4.30 P.M.

INSTRUCTIONS

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

Section A: Answer all questions (30 Marks)

1. Briefly discuss the structure of the meat muscle (6 marks)
2. Discuss the process through which muscles are converted into meat (6 marks)
3. Discuss rigor mortis and how it affects the quality of meat and meat products (6 marks)
4. Discuss the factors responsible for development of the ideal meat flavour (6 marks)
5. Discuss intrinsic and extrinsic factors of meat and meat products that may be useful in meat identification (6 marks)

Section B: Answer any TWO questions (40 Marks)

6. a) Meat authenticity and traceability are a major problem in the meat industry in Kenya. Discuss ways in which authenticity and traceability of meat products can be improved to ensure safety and quality for consumers (10 marks)
- b) Discuss the factors affecting the colour of fresh meat (10 marks)
7. a) Briefly discuss the following quality characteristics of meat highlighting methods used to measure each (10 marks)
 - a. Water holding capacity
 - b. Texture

c. Flavour

b) Briefly discuss the factors affecting postmortem metabolism in muscles and therefore the properties of meat (10 marks)

8. a) Discuss the development of acidity in meat muscles explaining how pH may negatively affect meat quality (12 marks)

b) Discuss the factors that influence the texture of meat and meat products (8 marks)
