

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF AGRICULTURE AND ENVIRONMENTAL SCIENCE

AGA 429

Department of Animal Science
BSc. Animal Science and Technology Part IV Examination

Animal Products and Processing

c

3 HOURS (100 Marks)

JUN 2023

INSTRUCTIONS

Answer any **FOUR** questions. Each question carries **25 marks**.

1. Explain how the Commission International De L' Eclairage (CIE)" colour system (CIE, 1976) is used to measure meat colour. [25 marks]
2. Discuss the following causes of food spoilage:
 - a) Microorganism. [6 marks]
 - b) Chemical. [6 marks]
 - c) Physical. [7 marks]
 - d) Vermin. [6 marks]
3. Describe the conversion of muscle to meat. [25 marks]
4. Discuss the following methods of meat preservation:
 - a) Canning. [5 marks]
 - b) Freezing. [5 marks]
 - c) Smoking. [5 marks]
 - d) Salt and air drying. [10 marks]
5. Outline the seven principles of a HCCP plan. [25 marks]
6. Discuss how the following factors affect meat quality:
 - a) pH. [4 marks]
 - b) Age. [4 marks]
 - c) Breed. [4 marks]
 - d) Pre- slaughter stress. [13 marks]

End of Paper