UNAM
UNIVERSITY OF NAMIBIA

FACULTY	AGRICULTURE, ENGINEERING AND NATURAL SCIENCES		
SCHOOL	AGRICULTURE AND FISHERIES SCIENCES		
DEPARTMENT	FOOD SCIENCE AND SYSTEMS		
SUBJECT	MEAT SCIENCE AND TECHNOLOGY		
SUBJECT CODE	F3611SM		
DATE	JUNE 2025		
DURATION	3 HOURS	**MARKS**	100

Second Opportunity Examination

Examiner: Dr. S.C. Barrion

Internal Moderator: Mr. S. Emvula

External Moderator: Prof. V.A. Jideani

This examination consists of one **(1)** page excluding this front page.

Instructions

Answer ALL five (5) questions

QUESTION 1

a) List and state the roles of (10) natural spices commonly used in the processing of meat products. **[10]**

b) Compare and contrast vacuum and Modified Atmosphere Packaging (MAP) for meat products. **[10]**

QUESTION 2

a) Define rigor mortis and discuss its importance in determining meat quality. **[5]**

b) Identify and describe three (3) functional proteins of meat. **[10]**

QUESTION 3

a) Describe the general structure of the striated (skeletal) muscle cell. **[10]**

b) Describe (6) factors that affect the composition of meat and discuss how each factor contributes to variations in meat composition. **[10]**

QUESTION 4

a) Distinguish between carcass dressing and carcass handling and discuss the specific processes involved in each practice. **[10]**

b) Discuss the importance of handling of animals prior to slaughter in relation to meat quality. **[10]**

c) Describe environmental hygiene in slaughterhouses. **[5]**

QUESTION 5

a) Compare and contrast Antemortem and Postmortem Inspections in the context of meat processing. **[5]**

b) Discuss and outline the typical characteristics used to assess meat quality. Elaborate on key factors to illustrate your points. **[10]**

c) Describe the aims of meat hygiene. **[5]**

END OF THE EXAMINATION