UNAM
UNIVERSITY OF NAMIBIA

FACULTY	AGRICULTURE, ENGINEERING AND NATURAL SCIENCES		
SCHOOL	AGRICULTURE AND FISHERIES SCIENCES		
DEPARTMENT	FOOD SCIENCE AND SYSTEMS		
SUBJECT	FOOD PACKAGING, STORAGE AND DISTRIBUTION		
SUBJECT CODE	AFST 3861		
DATE	JUNE 2025		
DURATION	2 HOURS	**MARKS**	100

Second Opportunity Examination

Examiner: Dr. S.C. Barrion

Internal Moderator: Prof. K.K.M. Nantanga

External Moderator: Prof. V.A. Jideani

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

Instructions

- **Answer ALL five (5) questions**

QUESTION 1

a) Outline the application and mechanism of a substance applied to the packaging material of sponge cake to inhibit mould growth. **[5]**

b) Describe the use of tin plates as food packaging material. **[10]**

QUESTION 2

a) Explain the process involved in the manufacturing of laminates. **[10]**

b) Discuss the systems used for food packaging. **[10]**

QUESTION 3

a) Examine the role of active preservation technology in food packaging. **[10]**

b) Discuss the molecular level formation of plastic. **[10]**

QUESTION 4

a) Examine the application of traceability technology within the food packaging industry. **[5]**

b) Discuss the role of each gas used in Modified Atmosphere Packaging. **[15]**

c) Describe the importance of lacquering in cans. **[5]**

QUESTION 5

a) Explain the use of metallic materials in food packaging and outline their advantages and disadvantages. **[10]**

b) Discuss the advantages and disadvantages of using glass and polyethylene terephthalate (PETE) as types of food packaging. **[10]**

END OF THE EXAMINATION