



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 2024		
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) Describe aseptic processing and packaging. [10]
- b) Discuss the two (2) main processes used to manufacture plastic bags. [15]

QUESTION 2

- a) Describe substances that can be used to limit oxygen in food packaging. [5]
- b) Discuss the four (4) types of paperboards used for food packaging. [10]

QUESTION 3

- a) Discuss the two (2) main types of cans used as food packaging. [15]
- b) Metallic materials are used extensively in food packaging. Describe their use and outline the pros and cons of their use. [10]

QUESTION 4

- a) Outline the advantages and disadvantages of glass and polyethylene terephthalate (PETE) as types of food packaging. [10]
- b) Discuss the application of traceability technologies in the food packaging industry. [5]

QUESTION 5

- a) Discuss the formation of plastic at the molecular level. [10]
- b) State and describe a typical multilayered food packaging material used for powdered soup sachets. [10]

END OF THE EXAMINATION