



FACULTY	AGRICULTURE, ENGINEERING AND NATURAL SCIENCES		
SCHOOL	AGRICULTURE AND FISHERIES SCIENCES		
DEPARTMENT	FOOD SCIENCE AND SYSTEMS		
SUBJECT	FOOD PROCESSING TECHNOLOGY		
SUBJECT CODE	AFSC 3791		
DATE	JUNE 2024		
DURATION	3 HOURS	MARKS	100

SECOND OPPORTUNITY EXAMINATION

Examiner: Mr. C. Samundengu

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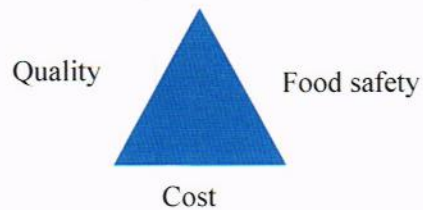
This question paper consists of one (1) page excluding this front page.

Instructions:

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

QUESTION 1

- a) Briefly discuss the meaning and implication of the diagram below:



[5]

- b) Motivate for a processing company introducing a HACCP programme. [10]
c) Discuss Pre-requisite programmes in food processing. [5]

QUESTION 2

- a) With the aid of an example, illustrate how hurdle technology can be applied synergistically resulting in improvement of product quality and economic property. [8]
b) Outline four (4) examples of heat processing affecting the nutritional value of foods. [8]
c) Briefly discuss the importance of size sorting for a company that packs and processes fresh fruits. [4]

QUESTION 3

- a) Draw a table that shows Class of contaminant, Probable source of contaminant and, Method of removal of contaminant for the following contaminant classes: mineral, plant, animal, chemical, and microbial cells. [10]
b) Outline five (5) product properties that can be influenced by particle size distribution of the product. [10]

QUESTION 4

- a) Sun drying is the oldest and probably the most common way of drying foods. Describe five (5) disadvantages of sun drying. [10]
b) Outline the ways in which extrusion equipment can be classified. [6]
c) Advise on the operating variables, which someone wishing to develop an extruded product can vary in order to arrive at a suitable product. [4]

QUESTION 5

- a) Discuss five (5) important considerations of chill storage. [10]
b) Exhausting is an important step in the canning process. Describe its purpose and the ways it can be done. [10]

END OF EXAMINATION