



# Technical University of Mombasa

Faculty of Applied and Health Sciences

**DEPARTMENT OF PURE AND APPLIED SCIENCES**  
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF  
TECHNOLOGY IN APPLIED CHEMISTRY  
**BTAC**

**AFS 4401: FOOD PROCESSING**

SPECIAL/SUPPLEMENTARY EXAMINATION

OCTOBER 2013 SERIES

2 HOURS

Instructions to candidates:

This paper consist of **FIVE** questions

Answer question **ONE** (compulsory) and any other **TWO** questions

## Question ONE

- a) State FOPUR contributions of food additives in food processing (4marks)
- b) Identify FOUR functions of a food package (4marks)
- c) Distinguish between internal and external damage in raw materials (4marks)
- d) Highlight four types of spoilage that occur in carried products (4marks)
- e) Explain the importance of geometrical properties of food in food processing (4marks)
- f) Explain the factors that control the rate of heat transfer in dehydration of food (4marks)
- g) Identify three common ingredients in cured meat products and state their role. (6marks)

## **Question TWO**

By use of a flowchart outline the processing of the following products

- a) Pineapple juice **(10marks)**
- b) Carried vegetable **(10marks)**

## **Question THREE**

- a) Explain the term 'cold sterilisation' **(2marks)**
- b) Discuss FIVE applications of food irradiation **(15marks)**
- c) Explain the limitation in use of irradiation as a preservation method in developing countries **(3marks)**

## **Question FOUR**

Describe the processing of the following products

- a) Cheese **(10marks)**
- b) Yoghurt **(10marks)**

## **Question FIVE**

- a) Explain FOUR reasons for heating food (8marks)
- b) Discuss thermal processing under the following:
  - (i) Blanching **(6marks)**
  - (ii) Sterilization **(6marks)**