

AUGUST 2023
EBS 307
FOOD HANDLING AND PRESERVATION
2 HOURS

Candidate's Index Number
Signature:

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
SCHOOL OF EDUCATIONAL DEVELOPMENT AND OUTREACH
INSTITUTE OF EDUCATION

COLLEGES OF EDUCATION
FOUR-YEAR BACHELOR OF EDUCATION (B.ED)
THIRD YEAR, END-OF-FIRST SEMESTER EXAMINATION, AUGUST 2023

15TH AUGUST 2023 FOOD HANDLING AND PRESERVATION 9:00 AM – 11:00 AM

[60 MARKS]

Answer **THREE** questions in all; Question 1 and any **TWO** others.

1.
 - a. Write **three** ways are the texture of frozen foods affected. 3 marks
 - b. Describe the characteristics of deteriorated sea foods during freezing. 1 mark
 - c. What is the easiest way to promote quality deterioration in frozen foods? 1 mark
 - d. Write **three** changes in functional properties occur in frozen cheese. 3 marks
 - e. Differentiate between rancidity in minced meat and big pieces of meat. 2 marks
 - f. Explain loss of colour in green vegetables during freezing. 1 mark
 - g. Indicate the changes that occur in the bones of chicken frozen for long periods. 1 mark
 - h. Describe the changes that occur in the quality of frozen fruits. 1 mark
 - i. Describe the changes that occur in frozen vegetables. 1 mark
 - j. What best way can the changes in '1(i)' be prevented or reduced? 1 mark
 - k. Identify **two** advantages of microwave cooking. 2 marks
 - l. State **one** major setback of vacuum packaging. 1 mark
 - m. Which technology for preservation is comparable to pasteurization and why? 2 marks

2.

- a. How important are packaging and quality management tools in the food chain? 2 marks
- b. State **two** main purposes for food packaging. 2 marks
- c. Write **two** things make a package effective. 2 marks
- d. Materials used for packaging food need to withstand the treatments and processes involved. Provide **three** reasons for that. 3 marks
- e. In **three** ways, explain why it is not good to store food that needs to be heated and frozen in plastic containers. 3 marks
- f. Provide **four** reasons aluminium is the preferred material for canning. 4 marks
- g. Why is it important to cover food stored in the fridge? 1 mark
- h. Explain the importance of thoroughly defrosting meat before cooking. 2 marks
- i. State **one** important value of Irradiation to foods. 1 mark

3.

- a. Define the Quality of a food product. 1 mark
- b. What is the impact of low humidity and bruising on vegetables and fruits during harvesting? 2 marks
- c. Identify **four** conditions that degrade food during storage and distribution. 2 marks
- d. Categorize Preservation techniques into three. 3 marks
- e. Describe the **three** categories stated in '3(d)'. 3 marks
- f. When does preservation start in fruits? 1 mark
- g. State **four** reasons why heat energy is the most preferred method for food preservation. 2 marks
- h. Provide the **two** most common disadvantages of using heat as a food preservative method. 2 marks
- i. Which quality criterion is most important to food processors? 1 mark
- j. What makes the criterion mentioned in '3(i)' the most important? 2 marks
- k. Give one reason potatoes cannot be exposed to light in food storage. 1 mark

- 4.
- a. Identify **four** factors that aid spoilage in fish or seafood. 2 marks
 - b. What is the most common way to retain the safety of carcasses after slaughtering? 1 mark
 - c. How are the physiological and pathological changes in fruits and vegetables checked? 1 mark
 - d. Why is milk considered an excellent medium for the growth of a variety of microorganisms? 3 marks
 - e. What characterizes the spoilage of milk and dairy products? 2 marks
 - f. Provide **four** benefits of fermented foods. 2 marks
 - g. Identify **four** principles that reduce or prevent microbial spoilage of food. 2 marks
 - h. Identify **two** major roles played by carbon dioxide produced by microorganisms in food fermentations. 2 marks
 - i. Why are antibiotics discouraged from preserving food? 2 marks
 - j. What is the application of antioxidants in foods for and why is it very important? 2 marks
 - k. Write the main feature of rancidification. 1 mark