



# **GRETSA UNIVERSITY - THIKA**

## **UNIVERSITY EXAMINATIONS SEPTEMBER - DECEMBER 2021 SEMESTER**

### **CERTIFICATE IN NUTRITION AND DIETETICS**

**COURSE CODE: CIND 031**

**COURSE TITLE: BASIC FOOD PRESERVATION AND  
PROCESSING**

**DATE: 17 NOVEMBER 2021**

**TIME: 11.30 AM - 2.30 PM**

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#### **INSTRUCTIONS TO CANDIDATES**

1. SECTION A IS **COMPULSORY**.
2. SECTION B: ANSWER ANY OTHER **THREE** QUESTIONS.
3. **DO NOT** WRITE ANYTHING ON THIS QUESTION PAPER AS IT WILL BE AN EXAM IRREGULARITY.
4. ALL ROUGH WORK SHOULD BE AT THE BACK OF YOUR ANSWER BOOKLET AND CROSSED OUT.

**CAUTION:** All exam rooms are under CCTV surveillance during the examination period.

**SECTION A: COMPULSORY**

**MULTIPLE CHOICE QUESTIONS**

**[ONE MARK EACH]**

1. Which of the following organism does not have an economic benefit in food processing?
  - A. Yeasts
  - B. Bacteria
  - C. Fungi
  - D. Insects
2. Identify the substance that is not a food sweetener
  - A. Sorbital
  - B. Saccharine.
  - C. Glycerol
  - D. Aspartame
3. Which of the following is not a source of irradiation as a food processing technique?
  - A. Ultraviolet rays
  - B. Gamma rays
  - C. X rays
  - D. Electron beams
4. Which of the following is not processed through fermentation?
  - A. Butter
  - B. Bread
  - C. Peanut butter
  - D. Cheese
5. Which of the following foods is not suitable for blanching?
  - A. Carrots
  - B. Peas
  - C. Spinach
  - D. Eggs

**SHORT ANSWER QUESTIONS: ANSWER ALL QUESTIONS IN THIS SECTION**

1. List four methods of control of contaminants in the food industry **[4 Marks]**
2. Highlight factors that could determine the quality of finished products. **[5 Marks]**

3. State five uses of ionizing radiations in the food industry [5 Marks]
4. Highlight five roles of food preservation [5 Marks]
5. List six modern methods of food preservation [6 Marks]
6. List four requirements of a packaging material [4 Marks]
7. List 3 packaging materials and the food products they are best suited for [6 Marks]

**SECTION B: CHOOSE ANY THREE QUESTIONS]**

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**QUESTION ONE**

- a) Discuss five factors causing deterioration in foods [10 Marks]
- b) Discuss any five characteristics of enzymes [10 Marks]

**QUESTION TWO**

- a) State and discuss five types of food additives [10 Marks]
- b) Describe advantages and disadvantages of using food additives [10 Marks]

**QUESTION THREE**

- a) Distinguish between a toxin and an anti-nutrient [2 Marks]
- b) Describe four effects of consuming toxic constituents [8 Marks]
- c) Explain five types of anti-nutrients [10 Marks]

**QUESTION FOUR**

- a) Define packaging [2 Marks]
- b) Elaborate four types of packaging based on mode or style of packaging [8 Marks]
- c) Discuss the merits and demerits of using paper as a packaging material in the food industry [10 Marks]

**QUESTION FIVE**

- Discuss four food preservation techniques that primarily use high temperature. [20 Marks]