



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)
MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR**

**FIRST YEAR, FIRST SEMESTER MAIN EXAMINATION
FOR THE DIPLOMA**

IN

HOSPITALITY AND INSTITUTIONAL MANAGEMENT

COURSE CODE: DHIM 005

COURSE TITLE: FOOD SCIENCE

DATE: 13/12/2023 TIME: 2-4 PM

INSTRUCTIONS TO CANDIDATES

Answer ALL questions in SECTION A and B

Answer TWO questions from section C.

TIME: 2Hours

MMUST observes ZERO tolerance to examination Cheating
This paper consists three printed Pages. Please Turn Over

SECTION A: ANSWER ALL QUESTIONS (10 MARKS)

1. Cocci, Bacilli, Spirilla are all examples of?
 - A. Yeast.
 - B. Bacteria.
 - C. Moulds.
 - D. Lactose.
2. The chemical properties of food includes macronutrients such as _____ while the Physical properties includes aspects of _____.
 - A. calcium, iron
 - B. size, iron
 - C. size, color
 - D. fats, size
3. Which one is a false statement about food science?
 - A. Food science is the mass production of food products from raw materials utilizing the principles of engineering.
 - B. Food science is concerned with aspects of food processing, food preservation.
 - C. Food science involves the study of quality aspects of foods prior to consumption.
 - D. Food science is a discipline based upon biological physical and chemical of food.
4. Dispersed phase and dispersing medium of smoke are _____.
 - A. solid in liquid
 - B. liquid in solid
 - C. solid in gas
 - D. gas in solid
5. A type of food preservation technique that involves sealing food in sterilized airtight container is called?
 - A. Canning.
 - B. Irradiating.
 - C. Freezing.
 - D. Drying.
6. The following are factors that are responsible for the denaturation of proteins. Which one is **NOT**?
 - A. Heat.
 - B. Charge.
 - C. PH change.
 - D. Organic solvents.
7. A fungus that causes fermentation is called?
 - A. Enzymes.
 - B. Yeast.
 - C. Mold.
 - D. Bacteria.
8. Proteins are _____
 - A. made up of amino acids.
 - B. essential for the development of skin, teeth and bones.
 - C. is the only nutrient that can build, repair and maintain body tissues.
 - D. all the above.

9. One of the following substance belongs to a colloid system. Which one:
- A. Milk.
 - B. Accu water.
 - C. Vinegar.
 - D. Blood.
10. Hydrogenation is the conversion of unsaturated acid groups into the saturated one by a Catalyst known as _____
- A. Ti.
 - B. Pb.
 - C. Ni.
 - D. Sn.

SECTION B: ANSWER ALL QUESTIONS (30 MARKS)

11. Highlight **SIX** importance of food additives in the hospitality industry. (6mks)
12. List **SIX** causes of food poisoning in hotels. (6mks)
13. State **FOUR** principles applied in preservation of food in the hospitality industry. (6mks)
14. Outline **SIX** changes that takes place during cooking. (6mks)
15. Bacteria brings about some beneficial effects in the food industry. Highlight **SIX** of these benefits. (6mks)

SECTION C: ANSWER ONLY TWO QUESTIONS (30MARKS)

16. a) As a hospitality and institutional management student, discuss five methods you would Use to preserve food. (10mks)
b) State **FIVE** benefits of preserving food. (5mks)
17. a) Fats can be used in various ways in the hospitality industry. Explain. (10Mks)
b) Highlight **FIVE** methods of preventing browning of food. (5mks)
18. Food science plays an important role in food handling, preparation and service. Explain. (15mks)

12.12.13