



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR
SECOND YEAR FIRST TRIMESTER**

**SCHOOL OF PURE, APPLIED AND HEALTH
SCIENCES
DIPLOMA IN FOODS, NUTRITION, AND
DIETETICS**

**COURSE CODE: DND 2104
COURSE TITLE: FOOD PROCESSING AND
PRESERVATION**

DATE: 11TH DECEMBER, 2023

TIME: 0830-1130

INSTRUCTION TO CANDIDATES

Section A: Multiple Choice Questions. Answer ALL Questions

Section B: Short Answer Questions. Answer ALL Questions

Section C: Long Answer Questions. Answer Question ONE and any other ONE question.

This paper consists of 5 printed pages. Please turn over.

SECTION A: MULTIPLE CHOICE QUESTIONS (20 MARKS) SELECT THE CORRECT ANSWER.

1. Which one is not a method of freezing
 - A. Slow freezing
 - B. Refrigeration
 - C. Quick freezing
 - D. De-hydro freezing
2. Which one is not a reason of food preservation
 - A. To eliminate any potential micro-biology
 - B. To reduce variety to the diet
 - C. To produce new products
 - D. To maintain nutritional value of the food
3. Which one is not a chemical food preservative
 - A. Vinegar
 - B. Salts
 - C. Wood smoke
 - D. Alkalis
4. Which one does not affect the quality of meat
 - A. Tenderness
 - B. Flavour
 - C. Water holding capacity
 - D. Colour.
5. Which one is not a requirement of food packaging material
 - A. Must keep the product clean
 - B. Must not prevent the product from any damage
 - C. Must keep the product clean
 - D. Must prevent the product from damage
6. Which one is not a result of microbial growth in milk
 - A. Homogenization
 - B. Souring
 - C. Ropiness
 - D. Sweet curdling
7. Which one is not a result of food science and technology
 - A. Reduction in nutrient deficiency
 - B. Enhanced food safety
 - C. Increased home food preparation time
 - D. Large variety of delicious food choices
8. Which of these foods is not preserved by pasteurization
 - A. Milk

- B. Beer
 - C. Raisins
 - D. Meat
9. Which one is not an area of study in food technology and processing
- A. Food chemistry
 - B. Food microbiology
 - C. Food engineering
 - D. Food transportation
10. Which one is not a disadvantage of aluminium food packaging
- A. Aluminium can be easily recycled
 - B. Aluminium can be oxidized
 - C. Aluminium does not alter or impart any odour to food
 - D. Aluminium can tear food of high weight
11. Which one is not a food contaminant
- A. Heavy metal
 - B. Pesticides
 - C. Enzymes
 - D. Herbicide
12. Which one is not a result of interaction between food product and packaging materials
- A. Skin attacks
 - B. Asthma
 - C. Inflammatory reactions
 - D. Hair loss
13. Which one is not effect of toxic constituent
- A. Rapid growth
 - B. Paralysis
 - C. Dementia
 - D. Sensory damage
14. Which one is not an application of enzymes in food production
- A. Used in bread making
 - B. Used in margarine making
 - C. Used in production of alcoholic drinks
 - D. Used in meat tenderization
15. Which one is not a disadvantage of paper as packaging material
- A. If not treated, rough and not appealing
 - B. In the long run it leads to deforestation
 - C. It is recycled
16. Which one does not indicate deterioration of meat

- A. Abnormal colour
 - B. Off odours
 - C. Abnormal texture
 - D. Bright colour
17. Which food is not preserved by fermentation
- A. Butter
 - B. Margarine
 - C. Cheese
 - D. Alcoholic beverage
18. Which one is a disadvantage of using food additives
- A. They allow our growing urban population to have a variety of food all year round
 - B. They make many possible convenient without the inconvenience of daily shopping
 - C. They may be carcinogenic
 - D. They help improve colour
19. Which one is not a type of anti-nutrient
- A. Enzyme inhibitors
 - B. Glucosinotes
 - C. Goitrogens
 - D. Dhurrin
20. Which one is not true about dehydration/drying as a method of food preservation
- A. It involves complete removal of water
 - B. On reconstitution with water dry food are very close to original foods
 - C. Foods cannot be dried naturally
 - D. Food can be dried through controlled methods
 - D. Untreated paper is not safe

SECTION B: SHORT ANSWER QUESTIONS (40 MARKS). ANSWER ALL QUESTIONS.

1. Describe four fresh milk product (8 Marks)
2. Explain five ways of using enzymes on the quality of foods (6 Marks)
3. Explain three reasons for preserving food (6 Marks)
4. Explain two ways of using dried foods (4 Marks)
5. Identify two advantages of dried foods (4 Marks)
6. Identify three methods of controlling contaminants in food industry. (6 Marks)

SECTION C: LONG ANSWER QUESTIONS (40 MARKS).QUESTION ONE IS COMPULSORY, THEN CHOOSE EITHER QUESTION 2 OR 3.

1. (a) Explain five functions of food packaging (10 Marks)
(b) Explain five functions of food additives in food preservation. (10 Marks)

2. (a) Describe five types of food additives (10Marks)
(b) Identify five methods of food preservation (10 Marks)

3. (a) Discuss two methods of heat treatment in food preservation (10 Marks)
(b) Define fermentation (2 Marks)
(c) Identify two advantages of each of the following food packaging materials
(i) Metal
(ii) Plastic
(iii) Paper
(iv) Glass (8 Marks)