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(University of Choice)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

MAIN CAMPUS

UNIVERSITY MAIN EXAMINATIONS

2023/2024 ACADEMIC YEAR

SECOND YEAR FIRST SEMESTER EXAMINATIONS

FOR THE DIPLOMA

OF

HUMAN NUTRITION AND DIETETICS

COURSE CODE: DND 068

COURSE TITLE: FOOD PARASITOLOGY AND MICROBIOLOGY

DATE: 5/12/2023 **TIME: 9:00 A.M -11: 00A.M**

INSTRUCTIONS TO CANDIDATES

Answer ALL questions in SECTIONS A and B
Read additional Instructions under SECTION C

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 4 Printed Pages. Please Turn Over.

SECTION A: MULTIPLE CHOICE QUESTIONS; ANSWER ALL QUESTIONS (10 MARKS)

1. What is the primary source of micro-organisms found in food?

   A. Soil and water

   B. Plants and plant products

   C. Intestinal tract of man and animals

   D. All of the above

2. _____ is **NOT** a primary source of food-poisoning bacteria.

   A. Soil and water

   B. Plants and plant products

   C. Intestinal tract of man and animals

   D. Food utensils

3. _____ are the intrinsic and extrinsic factors that affect microbial growth in food.

   A. pH, moisture, temperature, oxygen, carbon dioxide, light, pressure, and radiation

   B. pH, moisture, temperature, oxygen, carbon dioxide, light, pressure, and humidity

   C. pH, moisture, temperature, oxygen, carbon dioxide, light, pressure, and time

   D. pH, moisture, temperature, oxygen, carbon dioxide, light, pressure, and sound

4. Which of the following is **NOT** a type of micro-organism found in foods?

   A. Bacteria

   B. Fungi

   C. Viruses

   D. Insects

5. What is the most common cause of food spoilage in meat and meat products?

   A. Pseudomonas spp.

   B. Aspergillus spp.

   C. Bacillus spp.

   D. Candida spp.

6. Which of the following are symptoms of common food-borne illnesses?

   A. Nausea and vomiting

   B. Diarrhea and abdominal pain

   C. Headache and fever

   D. All of the above

7. What is the method used to determine the number of micro-organisms in food?

   A. Examination of bacteria

   B. Methods of sampling microorganism

   C. Methods of isolation

   D. Identification and enumeration of indicator microorganisms

8. Which of the following is **NOT** a type of food product that can be stored?

   A. Meat and meat products

   B. Poultry and sea-foods

   C. Fruits and vegetables

   D. All of the above can be stored

9. Which one of the following is a methods used to isolate microorganisms from food?

   A. Culture media method

   B. Microscopic method

   C. Biochemical method

   D. All of the above

10. Which of the following is **NOT** a classification of food spoilage?

   A. Physical spoilage

   B. Chemical Spoilage

   C. All of the Above

   D. None of the Above

SECTION B: SHORT ANSWER QUESTIONS; ANSWER ALL QUESTIONS (30 MKS)

11. Give **SIX** highly perishable foods. **(6 mks)**

12. Outline **SIX** factors that are responsible for food spoilage. **(6 mks)**

13. Briefly explain **SIX** food preservation methods. **(6 mks)**

14. Illustrate the lifecycle of port tapeworm. **(6 mks)**

15. List **SIX** microorganisms that can be found in food. **(6 mks)**

SECTION C: ESSAY QUESTIONS; ANSWER ONLY TWO QUESTIONS; Q16 COMPULSORY (30 MKS)

16. Describe **FIVE** common food borne illnesses; include the illness, a cause, one symptom, and two preventive strategies for each case **(15 mks)**

17. Discuss **FIVE** ways to prevent food poisoning. **(15 mks)**

18. Describe **FIVE** food storage equipment: include equipment, food stored, two advantages and one advantage for each case **(15mks)**