

**NATIONAL UNIVERSITY OF LESOTHO
FACULTY OF AGRICULTURE
DEPARTMENT OF ANIMAL SCIENCE**

SUPPLEMENTARY EXAMINATION

ANS2508: FOOD SAFETY AND PUBLIC HEALTH

AUGUST, 2023

MARKS: 100

TIME: 3 HOURS

INSTRUCTIONS:

- Answer all questions
- Start each question on a new page with the exception of question 1.

QUESTION 1

Choose the best answer in the following:

- 1) Which of the following is not a type of microorganism?
 - a. Virus
 - b. Atom
 - c. Parasite
 - d. Bacteria

- 2) What is the best way to stop the growth of bacteria in food?
 - a. Clean countertops and cutting boards daily.
 - b. Control the temperature of food
 - c. Use clean cloths to clean spill ups
 - d. Cover food

- 3) Which of these is the term for disease-causing microorganism?
 - a. Yeast
 - b. Pathogen
 - c. Spore
 - d. Cell

- 4) Which of the following is an example of the practice that could cause cross-contamination?
 - a. Storing raw chicken in a tightly sealed container on the bottom shelf of the fridge.
 - b. Using separate cutting boards for raw and ready-to-eat foods
 - c. Washing hands after handling raw meat
 - d. Using same knife for cutting raw chicken and then fresh vegetables

- 5) The total time that the food should be in the “Danger zone” from receiving to serving should not be longer than:
 - a. 5 hours
 - b. 30 minutes
 - c. 2 hours
 - d. 60 seconds

- 6) Which of these actions could contaminate your hands with food poisoning bacteria?
- a. Washing your hands after using a handkerchief
 - b. Handling raw food
 - c. Taking customers' orders in a busy restaurant
 - d. Washing your hands after handling rubbish
- 7) Who is at high risk of getting foodborne diseases?
- a. Children
 - b. Seniors
 - c. People with weak immune system.
 - d. All the above
- 8) Which of the statements is true?
- a. Chemical food poisoning is only caused by cleaning products.
 - b. Soil can contain harmful microbes so you should always wash fruits and vegetables.
 - c. Reheating leftover foods to high temperatures will always make it safe to eat.
 - d. Contaminated or unsafe foods will always smell or look bad.
- 9) Which ONE of these statements is RIGHT?
- a. High risk foods are high in protein and contain moisture
 - b. All foods are high risk
 - c. Bacteria do not grow on high risk foods
 - d. All high-risk foods can be stored safely at room temperature
- 10) What is the best way to control the spread of viruses?
- a. Wash cutting boards with soapy water
 - b. Wash your hands
 - c. Keep hot foods hot
 - d. Refrigerate potentially hazardous foods

QUESTION 2

Describe the following terms with examples as applied in food safety:

- a. Hazard
- b. Foodborne outbreak
- c. Temperature abuse
- d. Vehicles of contamination
- e. Danger zone

[20]

QUESTION 3

Explain bacterial growth using the curve to demonstrate various growth phases.

[25]

QUESTION 4

Pathogens act differently to cause diseases. Explain the mode of action for pathogens to cause diseases in consumers of contaminated food.

[15]

QUESTION 5

In order to ensure food safety throughout the food chain a number of control systems and tools are put in place. Describe the seven (7) principles of HACCP as a food safety control system.

[20]