



UNIVERSITY OF ESWATINI
Faculty of Health Sciences
Department of Environmental Health Science

DEGREE IN ENVIRONMENTAL HEALTH AND FOOD
SCIENCE

FINAL EXAMINATION PAPER 2019

TITLE OF PAPER : FOOD HYGIENE

COURSE CODE : EHS 227

DURATION : 2 HOURS

MARKS : 100

INSTRUCTIONS : READ THE QUESTIONS & INSTRUCTIONS CAREFULLY

: ANSWER **ANY FOUR** QUESTIONS.

: EACH QUESTION **CARRIES 25** MARKS.

: WRITE NEATLY & CLEARLY

:

: BEGIN EACH QUESTION ON A SEPARATE SHEET OF PAPER.

DO NOT OPEN THIS QUESTION PAPER UNTIL PERMISSION IS GRANTED BY THE INVIGILATOR.

QUESTION ONE

Multiple choice questions. Choose the best answer by just writing the question number and the letter of your selection. e.g "1. A"

- 1. What is the correct temperature that frozen food should be kept at? (1)**
 - A. 0 degrees
 - B. 15 degrees or lower
 - C. -18 degrees or lower
 - D. 20 degrees or lower

- 2. Where should raw meat be stored in a refrigerator? (1)**
 - A. At the top.
 - B. In the middle.
 - C. At the bottom, below all other food.
 - D. A and B are correct

- 3. Which one of the following jewellery is acceptable for a food handler to wear? (1)**
 - A. Plain wedding band.
 - B. Arm ring.
 - C. Bracelet
 - D. A ring that is a symbol of religious faith.

- 4. What is the ideal temperature for Pathogens to flourish? (1)**
 - A. 10 degrees
 - B. 37 degrees
 - C. 55 degrees
 - D. 90 degrees

- 5. How many times can you reheat leftovers? (1)**
- A. As many times as you like
 - B. Twice.
 - C. Four times.
 - D. You should only reheat leftovers once.
- 6. Which of the following meats are safe to eat when they are pink? (1)**
- A. Chicken.
 - B. Pork.
 - C. Minced meat.
 - D. Lamb.
- 7. What are the basic steps for washing hands? (1)**
- A. Wash thoroughly with water and dry.
 - B. Apply soap, wash thoroughly, rinse and use paper towels.
 - C. Apply soap, wash thoroughly.
 - D. Wash hands with warm water and dry them
- 8. What is the reason for drying your hands after washing them? (1)**
- A. So that you don't drip water everywhere.
 - B. Because microorganisms are more easily spread with wet hands.
 - C. Your hands are slippery when wet, and you will not be able to hold kitchen utensils properly.
 - D. Wet hands are a nuisances
- 9. Which of the following is true about bacteria; (1)**
- A. Bacteria multiply and grow faster in warm environments.
 - B. Bacteria need air to survive.
 - C. Every type of bacteria can give people food poisoning.
 - D. By freezing food you can kill bacteria.

10. The ideal temperature in your fridge should be? (1)

- A. 4 – 10 degrees
- B. 1 and 4 degrees.
- C. 0 to 4 degrees.

11. Which one of the following foods is likely to contain the MOST bacteria? (1)

- A. Frozen raw chicken.
- B. Recently cooked chicken.
- C. An opened fizzy drink.
- D. Bottled mayonnaise.

12. Whilst in a food preparation or serving environment, what is the best way to dry your hands after washing them? (1)

- A. Using paper towels.
- B. Damp towels.
- C. Just let them dry naturally.
- D. Use an air drier.

13. How can you tell if food has enough bacteria to cause food poisoning? (1)

- A. It will smell.
- B. You can't, it will appear normal.
- C. It will have a different colour.
- D. It will taste different.

14. Which of the following powers do Environmental Health Officers NOT have? (1)

- A. Authority to close down premises.
- B. The power of arrest.
- C. Authority to enter premises without appointment.
- D. The power to seize foods.

15. It is important to prepare food safely because; (1)

- A. It helps to prevent food poisoning.
- B. Safely Prepared food looks better.
- C. Safely Prepared food tastes better.
- D. B and C

16. Which of the following does bacteria need to assist it to grow and multiply; (1)

- A. Water.
- B. Food.
- C. Warm temperatures.
- D. All of the above.

17. How do you know if a beef burger has been properly cooked and is safe to eat? (1)

- A. After cutting it in half and you see the inside as red you know it has been cooked properly.
- B. If you can see that it has been burnt then you know it is safe.
- C. If you can see the outside of the burger is evenly brown and when you cut it in the middle you can see that the meat is no longer pink.
- D. When it's no longer dripping blood

18. Food contaminated with food poisoning bacteria (pathogens) would; (1)

- A. Look different
- B. Smell badly
- C. Look and taste normal
- D. Generally speaking food poisoning bacteria cannot be smelled, tasted or seen (except with the aid of a microscope) on food.

19. In a place of work, the best way to dry your hands after washing them is to; (1)

- A. Use a cotton towel.
- B. Just shake excess water away.
- C. Use an air dryer.
- D. Use a paper towel.

20. When should you wash your hands, when preparing food? (1)

- A. After touching raw foods
- B. Before touching cooked foods
- C. After going to the toilet
- D. All of the above

21. Which of the following is a high risk food? (1)

- A. A bag of smoky bacon crisps
- B. An Easter egg
- C. A chicken sandwich
- D. Dry uncooked pasta

22. Which one of the following is not a type of hazard to food? (1)

- A. Physical
- B. Chemical
- C. Logical
- D. Biological

23. What is the main reason for wearing protective clothing? (1)

- A. It protects food from contamination
- B. It looks groovy
- C. It feels really comfortable to wear
- D. It washes well at lower temperatures

24. . What should food handlers use a hand basin for? (1)

- A. Washing their hands
- B. Washing utensils and hands
- C. Washing food waste bin.
- D. Washing dirty raw materials and utensils

25. Which is the best type of waste bin is best to be use in a kitchen? (1)

- A. A black bin bag
- B. Foot operated bin with a lid
- C. Old cardboard box
- D. Open dustbin for easy access

Total [25 Marks]

QUESTION TWO

Answer all questions in this section.

Define the following terms commonly used in food hygiene.

- | | |
|------------------------------|-----|
| (a) Septic | (1) |
| (b) Aseptic | (1) |
| (c) Botulinum cook | (3) |
| (d) Halophiles | (2) |
| (e) Xerophiles | (2) |
| (f) Neurotoxin | (2) |
| (g) Enterotoxin | (2) |
| (h) Mycotoxin | (2) |
| (i) D-value | (3) |
| (j) Water Activity (A_w) | (3) |
| (k) Bacteriophage | (2) |
| (l) Bacteraemia | (2) |

Total [25 Marks]

QUESTION THREE

- (a) Environmental health officers play a major role in public health highlight five functions of an EHO in food safety. (5)
- (b) You are employed by the Municipal Council of Mbabane as an EHO and one of the requirements for your job is to have advanced knowledge of food related legislations of Eswatini. What are the five food related legislations you would acquaint yourself with? (5)
- (c) Highlight the essentials to be considered when establishing food premises (4)
- (d) What are the qualities of an ideal sanitizer? (5)
- (e) In order to use detergents and disinfectants properly one has to know the factor that influence their effectiveness. Discuss two of these factors? (6)

Total [25 Marks]

QUESTION FOUR

- (a) Discuss the benefits and shortcomings of Quaternary Ammonium Compounds (Quats) as a sanitizer. (8)
- (b) Describe the five keys to safer food? (10)
- (c) Why is the cleaning of utensils important in a food premise? (5)
- (d) Which temperature range in food safety is in the 'danger zone' and why?(2)

Total [25 Marks]

QUESTION FIVE

- (a) The design and layout of food premises must follow a "linear flow" so that cross-contamination in food establishment is either minimized or eradicated. Elaborate on this statement. (15)
- (b) Personal hygiene is imperative in food premises. Discuss this statement? (10)

Total [25 Marks]