



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

BSc IN ENVIRONMENTAL HEALTH SCIENCE
RE-SIT EXAMINATION PAPER SEP 2020

TITLE OF PAPER: FOOD SAFETY & INSPECTION
COURSE CODE: EHM 410
DURATION: 2 HOURS
MARKS: 100
INSTRUCTIONS: READ THE QUESTIONS & INSTRUCTIONS CAREFULLY
ANSWER **ANY FOUR** QUESTIONS
EACH QUESTION **CARRIES 25 MARKS**
BEGIN EACH QUESTION ON A SEPARATE SHEET OF PAPER
WRITE NEATLY AND CLEARLY

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

QUESTION ONE

1. Briefly discuss the homogenization process of milk. [5 Marks]
2. Which good egg practices would you implement during egg production? [5 Marks]
3. What are the effects of caffeine overdose in the body? [3 Marks]
4. What is the name of the enzyme involved in curdling during the manufacture of cheese? [1 Mark]
5. Select **two** of the following factors and explain how they affect the quality of eggs? [6 Marks]
 - i) Type of breed
 - ii) Drugs
 - iii) Infections
 - iv) Age
 - v) Environment
6. The Public Health (Food hygiene) Regulations, 1973 give enforcing officers powers to ensure compliance with the law. List these powers. [5 Marks]

(25 Total Marks)

QUESTION TWO

1. What causes the greenish black discoloration in hard boiled eggs and how is it prevented? [6 Marks]
2. How would you control psocids in cereals? [4 Marks]
3. You suspect that a refrigerated container load of fresh fish contains food preservatives that are not permitted by the food legislation. As an authorised officer you are required to make a decision on how to deal with the situation on the spot. You decide to take a sample of the product and store the rest of the container load, pending laboratory test results. You are aware that storing the product will reduce its value and that this option could attract the possibility of compensation further down the track to the proprietor. Using examples, state your reasons for taking this decision? [10 Marks]
4. What is the purpose of enforcement? [5 Marks]

(25 Total Marks)

QUESTION THREE

1. List the five principles of enforcement to be taken into consideration by enforcing authorities in order to achieve compliance or bring food business owners to account for non-compliance. [5 Marks]
2. List the six methods of enforcement available to inspectors. [6 Marks]
3. In preparing for an inspection the authorised officer needs to make sure that they have all the equipment with them to conduct the inspection, List of some the equipment you may need to conduct an inspection. [4 Marks]
4. During an inspection in a food establishment, you come across no-compliance that requires you to issue an improvement notice. How would you go about ensuring that the food business owner complies with the improvement notice? [10 Marks]

(25 Total Marks)

QUESTION FOUR

1. Canned food spoilage may occur either microbiologically or non-microbiological (chemically). List four possible microbiological causes of spoilage in canned food. [4 Marks]
 2. What is leaker spoilage and how does it occur? [6 Marks]
 3. You visit a local retail bakery. Among other things you notice the bake house behind the servery is dark and dingy. Fluorescent light tubes have not been replaced contributing to the darkness. There is a build-up of grime and grease on the walls and light fittings. There are pests on the premises evidenced by fresh rodent and cockroach droppings. As an inspector, discuss the steps you would take to ensure compliance with the legislation. [10 Marks]
 4. What is a prohibition notice? Discuss. [5 Marks]
- (25 Total Marks)**

FIVE

1. What is the difference between prohibition and improvement notices? [4 Marks]
 2. You visit a local spice wholesaler who uses a concrete mixer to mix bulk curry mixes. The concrete mixer was purchased from a hardware store many years ago and was painted red. However, the paint is flaking off into the food and the machine drips oil into the barrel. As an inspector, discuss the steps you would take to ensure compliance with the food legislation? [6 Marks]
 3. During an inspection of a delicatessen department at the SPAR Supermarket, around 4pm, you identify ready-to-eat food items (sandwiches) displayed on a table. On further observation you note the following:
 - Temperature of potentially hazardous food is 25°C
 - Preparation time is 7am
 - The ready-to-eat food items are being purchased by customersWhat action would you take, as an authorized Officer, to ensure compliance? Use any "On-the-spot decision making tool to help you interpret and apply the legislation. [15 Marks]
- (25 Total Marks)**