



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

BSc IN ENVIRONMENTAL HEALTH SCIENCE  
MAIN 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. Canned food spoilage may occur either microbiologically or non-microbiological (chemically).  
List four possible microbiological causes of spoilage in canned food. [4 Marks]
  2. Why is carbon dioxide added in beverages? [5 Marks]
  3. Explain the difference between brown and white rice. [4 Marks]
  4. Why do people who want to lose weight prefer rye bread? [4 Marks]
  5. List **three** milk conditions caused by spoilage microorganisms. [3 Marks]
  6. Which good egg practices would you implement during egg production? [5 Marks]
- [25 Total Marks]**

**QUESTION TWO**

1. Why is it necessary to conduct inspections of food and food establishments? [5 Marks]
  2. Briefly discuss the roles and responsibilities of the following, for food safety and quality, within the food chain. [10 Marks]
    - i) The Farmer
    - ii) The Processor
    - iii) Handlers
    - iv) The Government
    - v) The Consumer
  3. Describe the following conditions of spoiled cans: [6 Marks]
    - i) Flipper
    - ii) Springer
    - iii) Hard swell
  4. What is a health claim? [2 Marks]
  5. List two types of products to which health claims do not apply. [4 Marks]
- [25 Total Marks]**

**QUESTION THREE**

1. What are the objectives of risk-based food inspection? [4 Marks]
  2. Briefly describe the traditional food inspection system and its challenges. [10 Marks]
  3. Briefly describe risk-based inspection procedure. [6 Marks]
  4. List **five** general conditions that cause spoilage and deterioration in vegetables and fruits. [5 Marks]
- [25 Total Marks]**

**QUESTION FOUR**

1. What makes bad eggs float in water? [6 Marks]
  2. Cheese can be divided into many types. Name **four** conditions that determine the type of cheese? [4 Mark]
  3. Illustrate the process of determining the category of a secondary food establishment using a decision tree diagram. [10 Marks]
  4. What is a food establishment? List five of the undertakings of food establishments. [5 Marks]
- [25 Total Marks]**

**QUESTION FIVE**

1. Discuss the following types of food businesses. [15 Marks]
  - i) High-risk Establishments/businesses
  - ii) Medium-risk Establishments/ businesses
  - iii) Low-risk Establishments/ businesses
2. How does 'soft' rot develop on fruits and vegetables? [10 Marks]

**(25 Total Marks)**