



QUALIFICATION : <b>BACHELOR OF ENVIRONMENTAL HEALTH SCIENCES</b>	
QUALIFICATION CODE: <b>08BOHS</b>	LEVEL: <b>6</b>
COURSE: <b>FOOD AND MEAT HYGIENE 2B</b>	COURSE CODE: <b>FMH612S</b>
DATE: <b>NOVEMBER 2023</b>	SESSION: <b>1</b>
DURATION: <b>3 HOURS</b>	MARKS: <b>100</b>

**FIRST OPPORTUNITY: QUESTION PAPER**

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**MODERATOR:** *MR JOSHUA HIDINWA*

**INSTRUCTIONS:**

1. Answer all questions on the separate answer sheet.
2. Please write neatly and legibly.
3. Do not use the left side margin of the exam paper. This must be allowed for the examiner.
4. No books, notes and other additional aids are allowed.
5. Mark all answers clearly with their respective question numbers.

**PERMISSIBLE MATERIALS:**

1. None

**ATTACHEMENTS**

1. None
2. This paper consists of 4 pages including this front pages.

## SECTION A

(30 MARKS)

### QUESTION 1

[10 MARKS]

- 1.0 Indicate if the below statements are true or false by writing "True" or "False" next to the corresponding question in your answer book.
- 1.1 Food poisoning is a chronic illness, which is caused by consumption of contaminated food. (1)
- 1.2 Butcher means any premises used for the sale of butcher's meat and for keeping, storing, preparing or exposing butcher's meat intended for sale. (1)
- 1.3 Non-essentials Amino acid is created by the body out of other chemicals that found in the human body. (1)
- 1.4 Vitamins B is a fat-soluble vitamin which means that the fat in foods helps the intestines absorb these vitamins into the body. (1)
- 1.5 Pellagra condition is associated with Dermatitis, weakness, intestinal distress neurologic neurologic manifestations, organ failure. (1)
- 1.6 Inadequate food safety measures in any country hinders trade in agricultural or animal produce and this results in lack of income at farmer level, which exacerbates poverty. (1)
- 1.7 Cell body absorbs glucose through haemoglobin, cell convert glucose to energy. (1)
- 1.8 Any product with healing or medical claims needs to be registered at the Medical Control Council (MCC). (1)
- 1.9 Bacillus thuringiensis, is a naturally occurring bacterium that produces crystal proteins that are lethal to insect larvae. (1)
- 1.10 Introducing foreign genes into food plants may have a positive impact on human health. (1)

**QUESTION 2****[10 MARKS]**

2.0 Match the term in Column A with the correct description/definition in Column B. (10)

<b>COLUMN A</b>	<b>COLUMN B</b>
2.1 Foodstuff, Cosmetics and Disinfectant Act No 54 of 1972	A. Small molecule that acts as the building block of cell.
2.2 General Health Regulation GN 121 of 1969 as amended	B. Help streamline work practices, reduce cleaning and maintenance and prevent cross contamination.
2.3 Amino acid	C. Heat speeds up chemical reactions, reduces surface tension, and decreases viscosity.
2.4 Sign of pest infestation	D. Powers and duties of Environmental Health Practitioners.
2.5 Design of Food Premise	E. Found in malt, cereal products, such as Oshikundu.
2.6 Sanitizer	F. Lack of Vitamin B3
2.7 Simple Carbohydrate	G. Footprints and tail marks in dust or food powders
2.8 Genetic Engineering	H. Ensure that no live animal or poultry or any other bird is kept in any part of the butchery.
2.9 Maltose	I. Create plants with the exact desired trait very rapidly and with great accuracy.
2.10 Pellagra	J. Referred to as blood sugar and dextrose.

**QUESTION 3****[10 MARKS]**

- 3.0 Define the following terms: (10)
- 3.1 Hazards Analysis Critical Control Point (3)
- 3.2 Food security (2)
- 3.3 Food poisoning outbreak (5)

**SECTION B****(30 MARKS)****QUESTION 4****[30 MARKS]**

- 4.1 Recall the specific objectives of Namibia Food Safety Policy of 2015. (5)
- 4.2 Discuss the factors that affect proper cleaning of an Industrial Kitchen. (7)

- 4.3 Elaborate on the macroscopic evidence of pest infestation at a flight catering establishment at Hosea Kutako International Airport. (8)
- 4.4 Discuss the minimum standards pertaining to the design and purpose of handwash facilities in the food premises. (10)

**SECTION C (40 MARKS)**

**QUESTION 5 [15 MARKS]**

- 5.0 Briefly explain health risks associated with Malnutrition to community members in rural Namibia. (15)

**QUESTION 6 [25 MARKS]**

- 6.0 You are assigned by Health Director of Hardap Region to investigate an outbreak of Food poisoning at Aranos district, describe the steps to follow during enquiry process. (25)

**GOOD LUCK**