



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

**FACULTY OF HEALTH, APPLIED SCIENCES AND NATURAL RESOURCES
DEPARTMENT OF HEALTH SCIENCES**

QUALIFICATION : BACHELOR OF ENVIRONMENTAL HEALTH SCIENCES	
QUALIFICATION CODE: 08BOHS	LEVEL: 6
COURSE CODE: FMH612S	COURSE NAME: FOOD AND MEAT HYGIENE 2B
SESSION: NOVEMBER 2022	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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MODERATOR:	MR. JOSHUA HIDINWA

INSTRUCTIONS
<ol style="list-style-type: none">1. Answer ALL the questions.2. Write clearly and neatly.3. Mark all answers clearly with their respective question numbers.4. No books, notes and other additional aids are allowed

PERMISSIBLE MATERIALS: NONE

THIS QUESTION PAPER CONSISTS OF 4 PAGES (Including this front page)

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 Anaemia is due to lack of protein in diet, leading to failure of neural development. (1)
- 1.2 Herbicide tolerance is scientifically proof to be time-consuming and expensive process. (1)
- 1.3 Nutrient deficiency diseases occur when there is an absence of nutrients which are essential for growth and health. (1)
- 1.4 Microbiologist continues sampling until the whole consignment is offloaded from the ship during pre-shipment inspection of foodstuffs. (1)
- 1.5 Undernourishment is most often due to enough high-quality food available to eat. (1)
- 1.6 Deficiency diseases are diseases which occur due to lack of nutrients. (1)
- 1.7 Essential Amino acids cannot be created and are only obtain through food. (1)
- 1.8 Goitor is caused by lack of iodine during pregnancy. (1)
- 1.9 There are claims that many children in Africa have developed life-threatening allergies to peanuts and other foods. (1)
- 1.10 Combining several sources of proteins allow one to obtain complete coverage of all essential Amino acids. (1)

QUESTION 2**[10 MARKS]**

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

COLUMN A	COLUMN B
2.1 Foodstuff, Cosmetics and Disinfectant Act No 54 of 1972	A. Provided to protect food from contamination.
2.2 Carbohydrate	B. Consist of simple and complex carbohydrates.
2.3 Potential environmental impacts	C. It is softening and weakening of bones from release of calcium from bones.
2.4 Ethics	D. It provides cells with energy while amino acid provide cells with building material for growth and maintenance.
2.5 Marasmus	E. Violation of natural organisms' intrinsic values.
2.6 Ceilings	F. Cause of 49% of the 10.4 million deaths occurring in children younger than 5 years in developing countries.
2.7 Rickets	G Symptoms includes fatigue, irritability, shortness of breath, constant headache.
2.8 Malnutrition	H. It is including unintended transfer of transgenes through cross-pollination, unknown effects on other organisms (e.g., soil microbes), and loss of flora and fauna biodiversity.
2.9 Anaemia	I. Results in poor wound healing, bone deformities, dwarfism, hyperpigmentation, fetal abnormalities, immune system failure.
2.10 Fats	J. Demand from owner or person in charge of the premise any information.

QUESTION 3**[10 MARKS]**

- 3.0 Define the following terms: (10)
- 3.1 Pest (2)
- 3.2 Test strip (2)
- 3.3 Simple carbohydrates (3)
- 3.4 Xerophthalmia (3)

SECTION B (30 MARKS)

QUESTION 4

[30 MARKS]

- 4.1 Recall the causative agent (1 mark) and problems associated (2 marks) with the following health conditions. (15)
- 4.1.1 Anaemia (3)
- 4.1.2 Cretinism (3)
- 4.1.3 Pellagra (3)
- 4.1.4 Osteoporosis (3)
- 4.1.5 Rickets (3)
- 4.2 Briefly explain health risks associated with Malnutrition to community members in rural Namibia. (15)

SECTION C (40 MARKS)

QUESTION 5

[15 MARKS]

- 5.1 Discuss the factors that affect proper cleaning of an industrial kitchen. (7)
- 5.2 Elaborate on the macroscopic evidence of pest infestation at a flight catering establishment at Hosea Kutako International Airport. (8)

QUESTION 6

[25 MARKS]

- 6.0 You are appointed as an Environmental Health Practitioner at Mata Mata port of entry in //Karas region, to execute port health services, explain the following procedures in terms of foodstuffs pre-shipments inspections: (25)
- 6.1 Pre-shipment inspections of Foodstuffs (Exporters). (10)
- 6.2 Pre-shipment inspections of Foodstuffs (Importers). (15)

GOOD LUCK