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| QUALIFICATION : BACHELOR of ENVIRONMENTAL HEALTH SCIENCES | |
| QUALIFICATION CODE: 08BOHS | LEVEL: 6 |
| COURSE: FOOD AND MEAT HYGIENE 2B | COURSE CODE: FMH612S |
| DATE: NOVEMBER 2024 | SESSION: 1 |
| DURATION: 3 HOURS | MARKS: 100 |

FIRST OPPORTUNITY EXAMINATION: QUESTION PAPER

EXAMINER: **MS. BERNOLDA BENJAMIN**

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

This paper consists of 6 pages including this front page

SECTION A**[30 MARKS]****QUESTION 1****[10 MARKS]**

- 1.0 State whether the following statements are True or False. Each question carries one (1) mark.
- 1.1 Butchers meat includes meat or offal of any bovine, calf, sheep, lamb, goat, pig, human flesh or bird that is intended for human consumption. (1)
- 1.2 Cleaning needs to be carried out before sanitizing and disinfecting can be carried out. (1)
- 1.3 Food handlers are subjected to medical examinations, at least once per annum, to ensure they can safely handle food stuff. (1)
- 1.4 All Certificates of Registration/Fitness Certificates shall be renewed on or before the end of each month. (1)
- 1.5 Food handlers need to wash their hands after removing waste, after visiting the toilet, between handling raw and cooked food, after touching their body, skin. (1)
- 1.6 Genetically modified organisms are used to only multiply the growth rate of certain food products. (1)
- 1.7 Pest and rodent infestation are allowed in a food establishment if they are dead, as it indicates pest and rodent control management. (1)
- 1.8 In a barbershop or hair salon, the hairdresser should make no provision for disinfecting boxes and any disinfection for the sterilization of hair equipment. (1)
- 1.9 The ratio of handwashing basins in a butchery is to be 1:15 with an addition of sufficient soap, nail brush and towels provided. (1)
- 1.10 Wall interior can be of any material, paint and colour in a food preparation area with limited lighting. (1)

QUESTION 2

[10 MARKS]

- 2.0 Assess the following statements and choose the correct one, only write the question number and the correct letter next to it. [10]
- 2.1 Planning and design of food premises improves food hygiene by: (1)
- a) Increase cross-contamination
 - b) Reducing the likelihood of pest infestation
 - c) Increasing the efficiency of equipment for hot and cold holding of food
 - d) Reduce compliance with relevant hygiene standards
- 2.2 All certificates of Business Registration/Fitness Certificates shall be renewed: (1)
- a) Bi-annually
 - b) 03 March, each year
 - c) On or Before 31 March, each year
 - d) 31 December, each year
- 2.3 Butchers meat includes: (1)
- a) Beef, Game and Fowls
 - b) Beef, Sheep, Goat, Pig
 - c) Beef, Human flesh, Goat, Sheep
 - d) A and B
- 2.4 A clean surface is: (1)
- a) A surface that is chemically and bacteriologically clean
 - b) A surface free of soil
 - c) A surface which bacteriological counts and chemical contents are unknown
 - d) A surface which is presentably shining and clean
- 2.5. Functional consequences of Vitamin A deficiency are: (1)
- a) Failure of the body to remove disease causing micro-organisms
 - b) Partial blindness of infants
 - c) Blindness, increased mortality and morbidity from infectious diseases and diarrhea
 - d) Failure of the body to fight new parasitic infections
- 2.6. Which of the following conditions best describes the consequences of other micronutrient deficiency: (1)
- a) Anaemia compromised immune function

- b) Osteoporosis, Pellagra, Rickets
- c) Growth retardation
- d) All of the above

- 2.7 An Environmental Health Practitioner has the right to enter any premises, to conduct inspections (1)
- a) Only with permission from the owner
 - b) Only being accompanied by the Namibian Police
 - c) At any time when it suits the EHP
 - d) At any reasonable time during business operational hours
- 2.8 Complete the Public and Environmental Health Act phrasing: (1)
- a) Public and Environmental Health Act, No. 1 of 2010
 - b) Public and Environmental Health Act, 2015, (No. 1 of 2015)
 - c) Public and Environment Act, No. 1 of 2015
 - d) Public, Wealth and Environmental Health Act, 2015. (No. 1 of 2015)
- 2.9 Which of the following statements best distinguishes between saturated and unsaturated fat: (1)
- a) Unsaturated fats are unhealthy when compared to saturated fats.
 - b) Saturated fats are solid at room temperature, while unsaturated fats are liquid at room temperature.
 - c) Unsaturated fats are derived from plants, while saturated fats are derived from animal products.
 - d) B and C.
- 2.10 What does HACCP stand for? (1)
- a) Hazard Analysis Critical Control Point
 - b) Hazard Analysis Control Checking Point
 - c) Hazard Analysis Critical Check Point
 - d) Hazard Analysis Chemical Control Point

QUESTION 3

[10 MARKS]

3.0 Define the following terms:

3.1 Abattoir (1)

3.2 Article of food (1)

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| 3.3 | Milk | (1) |
| 3.4 | Premises | (1) |
| 3.5 | Cosmetics | (1) |
| 3.6 | Foodstuff | (1) |
| 3.7 | Prohibited article | (1) |
| 3.8 | Treated | (1) |
| 3.9 | Disinfectant | (1) |
| 3.10 | Importer | (1) |

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| SECTION B | [40 MARKS] |
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| <u>QUESTION 4</u> | [20 MARKS] |
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| 4.1 | State and explain five (5) conditions/disease that are related to poor nutritional value and malnutrition. | [15] |
| 4.2 | Discuss the signs that will indicate pest and rodent infestation in a food establishment. | [5] |

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| <u>QUESTION 5</u> | [20 MARKS] |
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| 5.1 | Name the seven (7) principles of HACCP | (7) |
| 5.2 | List the requirements of labelling for foodstuffs, cosmetics and disinfectants of a product to be sold, imported or exported. | (10) |
| 5.3 | Mention and briefly explain the best practices in which GMO's are used which is for the benefit of food production | (3) |

SECTION C**[30 MARKS]****QUESTION 6****[20 MARKS]**

- 6.1 Explain the general requirements that need to be applied during design and construction of food premises. (10)
- 6.2 Differentiate between cleaning in place and cleaning out of place. (4)
- 6.3 Name four (4) occasions when food handlers should wash their hands. (4)
- 6.4 Outline the requirements for the transportation of meat. (2)

QUESTION 7**[10 MARKS]**

- 7.0 Discuss the Powers, duties and functions of an inspectors (Environmental Health Practitioner) according to the Foodstuffs, Cosmetics and Disinfectants Ordinance, 1979 Ordinance 18 of 1979: (10)

End of Examination

Total 100