



ZIMBABWE

**MINISTRY OF HIGHER AND TERTIARY EDUCATION,
INNOVATION, SCIENCE AND TECHNOLOGY
DEVELOPMENT**

**HIGHER EDUCATION EXAMINATIONS COUNCIL
(HEXCO)**

NATIONAL CERTIFICATE

IN

**PROFESSIONAL COOKERY, BAKING TECHNOLOGY, FOOD AND
BEVERAGE SERVICE AND TOURISM AND HOSPITALITY**

SUBJECT: Nutrition Hygiene and Safety

PAPER NO: 333/18/S10

DURATION: 3 hours

MARCH/APRIL 2023 EXAMINATION

REQUIREMENTS

INSTRUCTIONS TO CANDIDATE

Answer all questions

This paper consists of 3 printed pages.

QUESTION 1

- a) Explain the importance of legislation in catering industry. (5 marks)
- b) Highlight any five (5) situations that may result in recommendation for closure of a catering outlet following inspection by Environment Health Officers (EHO). (5 marks)

QUESTION 2

Discuss any six (6) factors that promote growth of micro-organisms in foods. (18 marks)

QUESTION 3

- a) State two (2) functions of each of the following nutrients:
- i) Vitamin B12 (2 marks)
 - ii) Vitamin D (2 marks)
 - iii) Dietary fibre (2 marks)
- b) Identify deficiency disease caused by lack of the following nutrients:
- i) Iodine (1 mark)
 - ii) Folate (1 mark)
 - iii) Niacin (1 mark)
 - iv) Vitamin K (1 mark)
- c) State four (4) fat soluble vitamins (4 marks)
- d) Explain the following:
- i) H.B.V proteins (2 marks)
 - ii) Monosaccharide (2 marks)
 - iii) Gelatinisation of starch (2 marks)
- e) Identify five (5) ways of denaturing proteins. (5 marks)
- f) Outline any two (2) examples of non essential amino acids. (2 marks)

QUESTION 4

- | | | |
|----|--|------------|
| a) | Examine functions of proteins to the human body. | (10 marks) |
| b) | Explain the effects of heat on fats and oils. | (9 marks) |

QUESTION 5

With the aid of a diagram illustrate the following fatty acids:

- | | | |
|----|---------------|-----------|
| a) | Oleic acid | (4 marks) |
| b) | Linoleic acid | (4 marks) |
| c) | Stearic acid | (4 marks) |

QUESTION 6

Explain the following nutrition terms:

- | | | |
|----|-----------------------|-----------|
| a) | Bacteria morphology | (2 marks) |
| b) | Condensation reaction | (3 marks) |
| c) | Basal metabolism | (3 marks) |
| d) | Special diet | (3 marks) |
| e) | Nutrients | (3 marks) |

...../fk