



ZIMBABWE

MINISTRY OF HIGHER AND TERTIARY EDUCATION

**HIGHER EDUCATION EXAMINATIONS COUNCIL
(HEXCO)**

NATIONAL CERTIFICATE

IN

**PROFESSIONAL COOKERY, TOURISM AND HOSPITALITY
MANAGEMENT, FOOD AND BEVERAGE MANAGEMENT**

SUBJECT: Nutrition and Hygiene

PAPER NO: 335/S07

MARCH/APRIL 2013 EXAMINATION

REQUIREMENTS

INSTRUCTIONS TO CANDIDATE

Answer any FIVE (5) questions.

This paper consists of 4 printed pages.

QUESTION 1

- a) Define the following terms:
- i) Rancidity (2 marks)
 - ii) Pernicious anaemia (2 marks)
 - iii) Obesity (2 marks)
 - iv) Non essential amino acids (2 marks)
 - v) Insulin (2 marks)
- b) Describe the functions of protein. (5 marks)
- c) i) Identify the disease caused by protein deficiency in children. (1 mark)
- ii) Describe the symptoms of the disease mentioned in (a). (4 marks)

QUESTION 2

- a) Explain the digestion and absorption of fats. (8 marks)
- b) i) State the mineral responsible for the absorption of vitamin C in the body. (1 mark)
- ii) Give another name for dietary fibre. (1 mark)
- c) Describe the methods of protein denaturation. (10 marks)

QUESTION 3

- a) Define food poisoning. (2 marks)
- b) Identify the food poisoning bacteria which can easily contaminate the following foods:
- i) salted foods e.g. ham
 - ii) dirty eggs and raw poultry
 - iii) cereals especially reheated rice
 - iv) under-sterilized canned food
 - v) large quantities of luke warm meat casserole (5 marks)
- c) State three (3) favourable conditions for bacterial growth. (3 marks)
- d) Describe the care of the following which food handlers should take to ensure good personal hygiene:
- i) Hair (2 marks)
 - ii) Hands (2 marks)
 - iii) Teeth (2 marks)
- e) List eight (8) areas normally inspected by Environmental Health officers when they visit a catering establishment. (4 marks)

QUESTION 4

- a) Highlight any two (2) safety measures to take when deep fat frying. (2 marks)
- b) State a reason for each, why adequate ventilation and lighting are of paramount importance in the kitchen. (2 marks)
- c) State the substances present in the following fire extinguishers and the types of fires they can extinguish:
- i) Black extinguishers (2 marks)
 - ii) Cream extinguishers (2 marks)
 - iii) Green extinguishers (2 marks)
- d) Describe the requirements of the Health and Safety at Work Association (HASAWA) Act in terms of professional chefs protective clothing? (5 marks)
- e) Describe the provisions of the Food and Drugs Act. (5 marks)

QUESTION 5

- a) Discuss vitamin B1 under the following:
- i) Functions (2 marks)
 - ii) Sources (2 marks)
 - iii) Deficiency diseases (2 marks)
- b) Name an essential Amino Acid required in children's diets for growth. (1 mark)
- c) Identify the sugar found in:
- i) An apple (1 mark)
 - ii) Milk (1 mark)
 - iii) Maize (1 mark)
- d) Illustrate the bacterial growth curve and explain each growth stage. (10 marks)

QUESTION 6

- a) Differentiate between viral food poisoning and chemical food poisoning. (4 marks)
- b) State the costs of poor food hygiene practices to catering establishments. (6 marks)
- c) Illustrate the general structure of bacterial cell. (10 marks)

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QUESTION 7

Describe how food poisoning can be prevented in catering establishments.

(20 marks)

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