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KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION, 2023/2024 ACADEMIC YEAR
FOR THE CERTIFICATE IN HOSPITALITY MANAGEMENT
CHM 107: FOOD SCIENCE AND NUTRITION

Date: 19TH APRIL 2023
Time: 8;30AM-10:30AM

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

QUESTION ONE (30 MARKS)

- a) Define the following terms;
- i) Nutrition (2 Marks)
 - ii) Nutrients (2 Marks)
 - iii) Balanced diet (2 Marks)
 - iv) Malnutrition (2 Marks)
- b) Anaemia is caused by lack of iron in the body. Explain symptoms of anaemia. (6 Marks)
- c) Acid refers to a compound that reacts with metals to form a salt and hydrogen, state properties of acids. (5 Marks)
- d) The recommended intake of water is 8 glasses per day. Explain FIVE functions of water. (5 Marks)
- e) Explain food tests for the following;
- i) Proteins (2 Marks)
 - ii) Fats (2 Marks)
 - iii) Carbohydrates (2 Marks)

QUESTION TWO (20 MARKS)

- a) Rice is a food commodity that is a good source of starch. Explain types of rice. (8 Marks)
- b) Explain important things to consider when buying food commodities. (8 Marks)
- c) Fruits can be used in making puddings, desserts, salads and garnishes. Outline types of fruits. (4 Marks)

QUESTION THREE (20 MARKS)

- a) The chemical processes involved in digestion are brought about by enzymes. Explain the four main phases digestion takes place. (8 Marks)
- b) Food additives refer to natural and synthetic compounds added to foods to supply nutrients, to enhance color, flavor / texture and to delay the onset of spoilage. Describe the categories of food additives. (10 Marks)
- c) Food contaminant refers to the presence harmful chemicals and microorganisms in food. State two classifications of contaminants. (2 Marks)

QUESTION FOUR (20 MARKS)

- a) Food spoilage is the state where the original nutritional value, texture and flavor of the food are damaged. Discuss the major causes of food spoilage. (10 Marks)
- b) Several factors affect the growth of micro-organisms, explain four factors. (8 Marks)
- c) Explain two ways of preventing chemical food poisoning. (2 Marks)

QUESTION FIVE (20 MARKS)

- a) Bacteria are unicellular minute organisms that can only be seen with the help of a microscope.
State conditions bacteria require in order to multiply. (4 Marks)
- b) Preservation helps in prolonging the shelf life of food. Discuss methods of food preservation.
(8 Marks)
- c) If a person is HIV positive, then he / she has been infected with the virus that causes AIDS.
Explain ways HIV/ AIDS can be managed. (8 Marks)