



MACHAKOS UNIVERSITY

University Examinations 2020/2021 Academic Year

SCHOOL OF HOSPITALITY AND TOURISM MANAGEMENT

DEPARTMENT OF HOSPITALITY MANAGEMENT

FIRST YEAR SECOND SEMESTER EXAMINATION

CERTIFICATE IN FOOD AND BEVERAGE PRODUCTION SALES AND SERVICE

FOOD SCIENCE AND NUTRITION THEORY

DATE: 3/9/2021

TIME: 8:30 – 11:30 AM

INSTRUCTIONS: answer question one (compulsory) and any other three questions.

SECTION A

QUESTION ONE

- a) Explain the meaning of the following terms as used in food science and nutrition.
 - i) Homologous series (2 marks)
 - ii) Malnutrition (2 marks)
- b) State four demerits of using additives in food (4 marks)
- c) State three ways through which reduction of moisture in food may be achieved.(3 marks)
- d) Highlight four indications of food that is inevitable for human consumption (4 marks)
- e) State five conditions necessary for growth of micro-organisms (5 marks)
- f) Identify three ways of prevention of human immune-deficiency virus(HIV) (3 marks)
- g) Identify four sources of each of the following nutrients in the diet
 - i) Beta carotene (2 marks)
 - ii) Protein (2 marks)
- h) Outline five uses of eggs in food production (5 marks)
- i) Highlight four ways in which a food handler may contribute to the spread of food poisoning bacteria. (4 marks)
- j) State four reasons that make food preservation important (4 marks)

QUESTION TWO

- a) Describe five functions of carbohydrates (10 marks)
- b) Explain five causes of malnutrition (10 marks)

QUESTION THREE

- a) Describe five characteristics of a base (10 marks)
- b) Describe five symptoms of a food allergy (10 marks)

QUESTION FOUR

- a) Water is very vital to the human body. Explain six functions of water (12 marks)
- b) Highlight four uses of enzymes in food processing (8 marks)

QUESTION FIVE

- a) Explaining five ways in which food safety can be achieved (10 marks)
- b) Describe five effects of yeast spoilage (10 marks)

QUESTION SIX

- a) Explain five importance of micro-organisms in the food industry (10 marks)
- b) Explain five methods of food preservation (10 marks)