

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATION

RESIT /SPECIAL EXAMINATION

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN
FOOD SCIENCE AND TECHNOLOGY**

FOST 212: FOOD MICROBIOLOGY II

STREAMS:

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 03/11/2021

11.30 A.M 1.30 P.M

INSTRUCTIONS:

**Answer all questions in section and any other Two in section B
SECTION A (30MARKS)**

1. Describe factors that may affect the growth of molds in food. (6marks)
- 2a) Explain the precautions that should be adhered to during preparation of culture medium in the laboratory. (4marks)
- b) Explain the differences between foodborne intoxication and food borne infection and state two examples in each (4marks)
- 3a) Outline the differences between prokaryotic and eukaryotic organisms (6marks)
- b) Explain the 4 major ways in which microorganisms may be enumerated (4marks)
4. a) Virus cannot be classified as true cell. Justify this statement (2marks)
- b) Describe the foodborne parasites and their implication in food. (4marks)

SECTION B (40MARKS)

5a) Discuss the importance of microorganisms in the current world and highlight specific examples. (14marks)

b) Explain the importance of using molecular tools in the identification of microorganisms (6marks)

6a) Discuss biochemical reactions that are majorly used in the identification of bacteria in food samples . (12marks)

b) Discuss measures that should be put in place to prevent food spoilage. (8marks)

7a) Describe the procedure that can be carried out to determine the Gram positive and Gram negative bacteria in food. (10marks)

b) With a clear illustration, discuss the growth curve of *Lactobacillus bulgaricus* in the production of yoghurt . (10marks)
