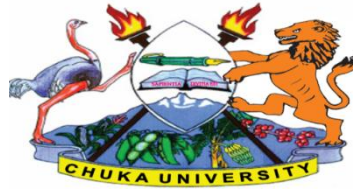


CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN
MICROBIOLOGY

MICB 220: MICROBIAL ECOLOGY

STREAMS:

TIME: 2 HOURS

DAY/DATE: THURSDAY 7/12/2017

11.30 A.M - 1.30 P.M.

INSTRUCTIONS:

- Answer all Questions in Section A and any TWO in Section B

SECTION A: [30 MARKS]

1. Describe the formation of a biofilm. [5 Marks]
2. Outline the role of microbes in biogeochemical cycles. [5 Marks]
3. (a) Describe the methods of culturing microbes. [5 Marks]
(b) Give 5 reasons why some microorganisms cannot be cultured in the laboratory. [5 Marks]
4. Classify soil microbes and their importance. [5 Marks]
5. Discuss microbial adaptation to extreme environment. [5 Marks]

SECTION B: [40 MARKS]

6. Discuss the factors that influence microbial growth. [20 Marks]
 7. Discuss microbial interactions with each other and the environment. [20 Marks]
 8. (a) Using a diagram, compare the phases of microbial growth. [10 Marks]
(b) Discuss the methods of measuring bacterial growth. [10 Marks]
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