



W1-2-60-1-6
JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY

University Examinations 2018/2019

**FOURTH YEAR FIRST SEMESTER SPECIAL/SUPPLEMENTARY
EXAMINATION FOR THE DEGREE OF BACHELOR OF**

SCIENCE IN AGRICULTURAL AND BIOSYSTEMS ENGINEERING

EBE 2406: APPLIED ENVIRONMENTAL MICROBIOLOGY AND ECOLOGY

DATE: MARCH 2019

TIME: 2 HOURS

**INSTRUCTIONS: ANSWER QUESTION ONE AND ANY OTHER TWO
QUESTIONS**

Question One (30 Marks)

- a) Differentiate between the following terms:
- (i) Niche and habitat (3 Marks)
 - (ii) Population and community (2 Marks)
- b) Explain negative effects of environment associated with aquaculture practice. (5 Marks)
- c) Describe five (5) agricultural economic importances of fungi. (5 Marks)
- d) Describe extractive industries that cause depletion of natural resources. (5 Marks)
- e) Explain the importance of marine life in the planet. (5 Marks)
- f) Describe single blood circulation in fish. (5 Marks)

Question Two (20 Marks)

Discuss organism's abiotic environment.

(20 Marks)

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Question Three (20 Marks)

Discuss fish physiological systems.

(20 Marks)

Question Four (20 Marks)

Discuss the uses of microbes in biotechnology.

(20 Marks)