



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR
SECOND YEAR SECOND SEMESTER**

**SCHOOL OF TOURISM AND NATURAL
RESOURCES MANAGEMENT
BACHELOR OF ENVIRONMENTAL BIOLOGY
AND HEALTH**

**COURSE CODE: EBH 2215
COURSE TITLE: GENERAL MICROBIOLOGY**

DATE: 25TH APRIL, 2018

TIME: 1100 - 1300 HRS

INSTRUCTIONS TO CANDIDATES

- Answer question ONE and any Other TWO questions
- Use illustrations where appropriate

SECTION A: ANSWER ALL QUESTIONS

1. Discuss the classification of bacteria in terms of their structure and characteristics **[6 marks]**
2. What is the importance of microscopy in microbiology? **[2 marks]**
3. Write down the names of different types of microscopes **[2 marks]**
4. (a) Define Growth. **[2 marks]**
(b) Explain the different phases in growth curve with proper diagram **[4 marks]**
6. Differentiate between batch culture and continuous culture **[2 marks]**
7. Why is 70% ethanol more effective than 95% ethanol **[2 marks]**
10. With detailed diagram, explain the role of microbes in Nitrogen cycle **[5 marks]**

SECTION B: ANSWER ANY THREE QUESTIONS

6. a) Discuss symbiosis **[10 marks]**
b) Compare and contrast beneficial and harmful uses of organisms **[5 marks]**
7. Discuss some of the diseases caused by bacteria **[15 marks]**
8. Discuss the effects of environmental factors on bacterial growth and survival **[15 marks]**
9. Compare and contrast the acquisition of novel genetic information in microbes via mutations and genetic exchange **[15 marks]**

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