



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2018/2019 ACADEMIC YEAR
FOURTH YEAR END OF SECOND
SEMESTER**

**SCHOOL OF SCIENCE AND INFORMATION
SCIENCES
BACHELOR OF SCIENCE**

**COURSE CODE: BOT 419
COURSE TITLE: MICROBIOLOGY II**

**DATE: 18TH APRIL, 2019
1300HRS**

TIME: 1100 -

INSTRUCTIONS TO CANDIDATES

a) Answer **ALL** questions in Section A and **ANY two** in **SECTION B**

b) Illustrate your answers with suitable diagrams and give examples wherever necessary.

This paper consists of 2 printed papers. Please turn over.

Answer ALL Questions in Section A

1. Explain the properties of micro flora organisms that enable them to survive in /on their hosts

(3 marks)

2 Explain the environmental effects of pathogen on plants

(3 marks)

3 Outline Rizosphere organism that is deleterious to plant growth and health

(3

marks)

4 Describe one media used for culturing of fungi and state its importance

(3 marks)

5 Describe three major factors that determine decomposition of organic matter

(3 marks)

6 Describe some factors that determine the functions of a healthy soil

(3 marks)

7 Describe the role of micro- organisms in soil decomposition

(3 marks)

8 Describe necrosis and mildew symptoms in plants

(3 marks)

9 Compare and contrast the symbiotic and non-symbiotic nitrogen fixation

(3 marks)

10 Explain how salinity and acidity control the activity of soil biota

(3 marks)

SECTION B: Answer Any Two Questions Each Question carries 20 marks

11 Discuss the human interventions that influences soil organic matter in an environment

(20 marks)

12 Discuss how you can increase/decrease the rate of soil decomposition in an ecosystem

(20 marks)

13 Explain symbiotic and non-symbiotic relationships in nitrogen fixation

(20 marks)

14. Discuss the identification and control of the major plant diseases in East African countries

(20 marks)

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