



UNIVERSITY
OF
JOHANNESBURG

FACULTY OF SCIENCE

DEPARTMENT OF BIOTECHNOLOGY& FOOD TECHNOLOGY (DFC)

MODULE: MCB1AE1/MCB1XB1 (MICROBIOLOGY 1)

CAMPUS: DFC

July Supplementary 2019

DATE:

25 May 2019

SESSION:

12:30 to 15:30

ASSESSOR

Prof Ezekiel Green

INTERNAL MODERATOR

Dr. Bheki Dlamini

DURATION: 3 HOURS

MARKS 100

NUMBER OF PAGES: 2

SURNAME AND INITIALS: _____

STUDENT NUMBER: _____ **CONTACT NUMBER:** _____

NUMBER OF PAGES:

INSTRUCTIONS:

- 1 READ ALL THE INSTRUCTIONS AND ANSWER ALL QUESTIONS
- 2 HAND THE **ANSWER SCRIPT** AS WELL AS YOUR **QUESTION PAPER**

QUESTION 1.**[25 Marks]**

1. Define the following terms as they are used in microbiology
 - a. Broth media
 - b. Mycology
 - c. Slant tubes
 - d. Mycoses
 - e. Cytopathic effects(2 Marks each)
2. Discuss oligotrophic environments (5 Marks)
3. Discuss capsids and give three types of capsids you know. (10 Marks)

QUESTION 2.**[25 Marks]**

- a. Name the stages of *Plasmodium vivax* that occurs in a mosquito (7 Marks)
- b. With the aid of a diagram, show the life-cycle of *Rhizopus stolonifera* (15 Marks)
- c. Briefly describe microbial biofilms. (3 Marks)

QUESTION 3.**[25 Marks]**

1. State 5 ways in which HIV can be transmitted. (5 Marks)
2. Write short notes on;
 - a. Viroids (5 Marks)
 - b. Satellites (Virusoids) (5 Marks)
 - c. Prions (5 Marks)
 - d. Describe viral genome (5 Marks)

QUESTION 4.

1. Name 5 medically important fungi and the diseases they cause. (10 Marks)
2. What are the beneficial uses of Fungi? (5 Marks)
3. Briefly discuss two types of Fungal reproduction (10 Marks)