



**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

(MAIN CAMPUS)

**UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR**

FIRST YEAR SECOND TRIMESTER EXAMINATIONS

**FOR THE DEGREE
OF
BACHELOR OF OPTOMETRY AND VISION SCIENCES
MAIN EXAMINATION**

COURSE CODE: BML 132

COURSE TITLE: INTRODUCTION TO MEDICAL MICROBIOLOGY

DATE: 27/04/2022

TIME: 3-5pm

INSTRUCTIONS TO CANDIDATES

This paper is divided into three sections, **A B** and **C**, carrying respectively: Multiple Choice Questions (**MCQs**), Short Answer Questions (**SAQs**) and Long Answer Questions (**LAQs**). Answer all questions.

TIME: 2 Hours

Answer all questions

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over

SECTION A (SHORT ANSWERED QUESTIONS) 40MKS

1. Describe the morphology of a bacterial cell (4marks)
2. Describe the following shapes of bacteria (4mks)
 - a. Sarcinae
 - b. Tetrads
 - c. Vibrios
 - d. Coccobacilli
 - e. Staphylococcus
 - f. Streptococcus
 - g. Bacillus
 - h. Spirocheates
3. Describe the bacterial growth curve (4mks)
4. Outline the procedure of the gram staining technique (4mks)
5. Define the following terminologies as used in bacteriology (4mks)
 - a. Nosocomial infections
 - b. Virulence
 - c. Opportunistic infections
 - d. Commensals
6. Outline the characteristics of Viruses (4mks)
7. State the Koch's postulates (4mks)
8. Explain the morphological forms of Fungi (4mks)
9. Outline the major symptoms of viral eye infections (4mks)
10. Describe the following types of Bacterial culture media (4mks)

SECTION B (LONG ANSWER QUESTIONS) 30MKS

11. Explain the pathogenesis of bacterial infections (10mks)
12. Describe the requirements of bacteria growth (10mks)
13. Describe the physical sterilization methods as used in a microbiology laboratory (4mks)