



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 – Meru-Kenya

Tel: +254(0) 799 529 958, +254(0) 799 529 959, + 254 (0) 712 524 293,

Website: info@must.ac.ke Email: info@must.ac.ke

University Examinations 2023/2024

SECOND YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF BIOCHEMISTRY

SBA 3251: GENERAL MICROBIOLOGY

DATE: APRIL 2024

TIME: 2 HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE (30 MARKS)

- a) Explain the following terms
 - i. Endosymbiosis theory (2 marks)
 - ii. Pasteurization (2 marks)
 - iii. Tyndalization (2 marks)
 - iv. Vaccination (2 marks)
 - v. Plasmids (2 marks)
- b) Distinguish between a prokaryote and an eukaryote (4 marks)
- c) Describe the different structural forms of fungal thallus based on septa (6 marks)
- d) Outline different sexual reproduction strategies in fungi (6 marks)
- e) Describe viral morphology using illustrations (draw) (4 marks)

QUESTION TWO (20 MARKS)

Discuss the different types of media used in the growing of microorganisms eg Bacteria

QUESTION THREE (20 MARKS)

- a) Discuss the economic importance of microbes (as friends and foes to humans)

QUESTION FOUR (20 MARKS)

In relation to acellular entities studied in microbiology

- a) Describe the Baltimore scheme for classification of viruses (12 marks)
- b) Outline with examples the diseases caused by proteinaceous infectious agents, prions (8 marks)