



# MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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## UNIVERSITY EXAMINATIONS 2023/2024

FIRST YEAR, SECOND SEMESTER EXAMINATION FOR THE DIPLOMA IN ANIMAL  
HEALTH AND PRODUCTION

### AAP 2156: MICROBIOLOGY

DATE: APRIL 2024

TIME: 1½ HOURS

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**INSTRUCTIONS:** Answer Question ONE and any other TWO questions.

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#### QUESTION ONE (30 MARKS)

- a) Define the following terms (6 Marks)
- i. Normal flora
  - ii. Pathogenicity
  - iii. Disease
  - iv. Mycology
  - v. Serology
  - vi. Virology
- b) State the general characteristics of bacteria (5 Marks)
- c) Explain three indicator systems used in the growth of viruses (3 Marks)
- d) Using examples classify fungi based on sexual reproduction (8 Marks)
- e) State three common viruses in animals and the diseases they cause (6 Marks)
- f) State four media used for fungal growth (2 Marks)



MUST is ISO 9001:2015 and



ISO/IEC 27001:2013 CERTIFIED

## **QUESTION TWO (15 MARKS)**

Discuss the terms used to describe the morphology of fungal colonies during identification

(15 Marks)

## **QUESTION THREE (15 MARKS)**

- a) State the cultural characteristics of *Staphylococcus aureus* (10 Marks)
- b) Define differential media and give an example (1 Mark)
- c) State four diseases caused by *Escherichia coli* (4 Marks)

## **QUESTION FOUR (15 MARKS)**

- a) State the general characteristics of Genus *Rickettsia* (10 Marks)
- b) Discuss two economic importance of fungi (4 Marks)
- c) Define facultative anaerobes (1 Mark)

