

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF
CERTIFICATE IN ANIMAL HEALTH AND PRODUCTION**

BOTA 00225: GENERAL MICROBIOLOGY

STREAMS: CERT (ANHE)

TIME: 2 HOURS

DAY/DATE: FRIDAY 19/12/2014

8.30 AM – 10.30 AM

INSTRUCTIONS:

SECTION A – 30 MARKS

1. (a) Draw a labeled diagram of a bacterium cell [3 marks]
(b) Identify two common methods of staining bacteria for observation and identification [2 marks]
2. (a) Give three forms of spherical bacteria [3 marks]
(b) Name the bacteria widely used as an indicator organism in sanity analysis of water. [2 marks]
3. (a) State three physical agents of microbial control [3 marks]
(b) State two benefits of microorganisms in agriculture. [2 marks]
4. (a) List the common methods of culturing microorganisms in the laboratory. [3 marks]
(b) Name two beverages obtained through microbial activity. [2 marks]
5. List the general phases in the lifecycle of animal viruses. [5 marks]
6. (a) List four examples of fungal asexual spores [2 marks]
(b) Name the classes of protozoans based on locomotion. [2 marks]

(c) Draw the structure of a naked virus. [1 mark]

SECTION B – 40 MARKS (ANSWER TWO QUESTIONS)

7. Discuss the chemical agents of microbial control. [20 marks]

8. Discuss the following livestock diseases, identifying the cause, mode of transmission, symptoms and control measures

(i) Newcastle disease [10 marks]

(ii) Animal Trypanosomiasis [10 marks]

9. Describe the applications of microbiology in modern day. [20 marks]
