



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2019/2020

SUPPLEMENTARY/SPECIAL EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE IN ANIMAL HEALTH AND PRODUCTION

KAS 211: EPIDEMIOLOGY

DATE: Wednesday, 13th January 2021

TIME: 4.30 p.m. - 6.30 p.m.

INSTRUCTIONS:

Answer ALL questions in SECTION A and ANY TWO questions in Section B.

SECTION A - 40 MARKS

1. Giving examples, briefly explain the importance of epidemiology in Animal health. (5 marks)
2. Distinguish between the following terms: (5 marks)
 - (a) Disease incidence and Disease prevalence
 - (b) Epidemic disease and Endemic Disease
3. Explain the use of proportion and rate in epidemiologic inquiry. (5 marks)
4. Outline the ways in which infectious diseases is transmitted in a population. (5 marks)
5. Explain the following terms with respect to a diagnostic test. (5 marks)
 - (a) Sensitivity
 - (b) Predictive value
6. Explain the importance of animal disease surveillance. (5 marks)
7. Outline the key steps in investigating a disease outbreak. (5 marks)
8. In a herd of cattle with 50 Friesian cows and 20 Zebu cows, Ten (10) Friesian cows and 2 Zebu cows became infected with ECF. Calculate the Relative Risk of a Friesian cow on the farm getting ECF compared to a Zebu cow. (5 marks)

SECTION B - 30 MARKS

9. Discuss the three types of epidemiological studies. (15 marks)
10. Discuss the agent and host factors that determine disease occurrence and severe. (15 marks)
11. Discuss the importance and characteristics of a disease surveillance system. (15 marks)

INVOLVEMENT IN ANY EXAMINATION IRREGULARITY SHALL LEAD TO DISCONTINUATION