



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2016/2017

**FOURTH YEAR FIRST SEMESTER EXAMINATION FOR DEGREE
OF BACHELOR OF SCIENCE WITH INFORMATION
TECHNOLOGY**

MAIN CAMPUS

AAN 403: MICROBIAL DISEASES

Date: 3rd December, 2016

Time: 3.30 - 6.30pm

INSTRUCTIONS:

- Answer ALL Questions in Section A and B.



SECTION A (40 Marks)

1.
 - a) Provide 4 examples of protozoan diseases. (2 marks)
 - b) Briefly explain the prevention of Hemorrhagic septicemia. (2 marks)
 - c) Write short notes on the epidemiology and diagnosis of coccidiosis in cattle (4 marks).
 - d) List 4 zoonotic diseases. (2 marks)

2.
 - a) Briefly describe the current methods used to diagnose bovine tuberculosis in cattle and outline their relative importance in control programmes. (5 marks)
 - b) Briefly discuss the aetiology and control of ovine pulmonary adenocarcinoma (jaagsiekte, sheep pulmonary adenomatosis). (3 marks)
 - c) Porcine Reproductive and Respiratory Syndrome (PRRS) is a contributor to respiratory disease in the pig. List 4 main clinical signs. (2 marks)

3.
 - a) List 4 diseases which dogs should be vaccinated against. (2 marks)
 - b) Chronic Respiratory syndrome is a respiratory disease complex of poultry caused by Mycoplasma and bacteria mainly *E. coli*. Outline factors that trigger the condition. (4 marks)
 - c) Briefly outline etiology and epidemiology of Rift valley fever. (4 marks)

4. a) Diarrhea is common in newborn calves, lambs, and kids. List 6 causes of the problem. (3 marks)
- b) African Horse Sickness present major challenge to horse owners. Briefly outline mode of transmission and control of the disease. (3 marks)
- c) The respiratory disease complex is caused by Mycoplasma and bacteria mainly *E. coli*. Highlight factors which trigger this condition in birds. (4 Marks)

SECTION B : 60 Marks

5. a) The udder secretion of a dairy cow in a farm where you are stationed has the appearance of thick, clotted pus.
- What is your most likely diagnosis? (2 marks)
 - How would you treat this animal? (2 marks)
 - Outline the options for the prevention or control of this common problem. (6 marks)
- b) Attention has been given in promoting donkey's welfare through "*tunza punda Ikutunze campaign*". Horses and donkeys are at serious risk of getting infected with Tetanus since they are working animals. (10 marks)
- List the clinical signs of tetanus in the donkeys.
 - Explain the pathogenesis of tetanus.
 - Describe how you would manage a case of tetanus.
 - What is the prognosis for this disease and how is it prevented?
6. You have been asked to investigate a bull said to be '*infertile*' based upon the fact that the forty (40) cows, with which he has been running, have been seen to be repeatedly returning to oestrus. Assuming that the bull is responsible rather than the cows: (20 marks)
- What would be the most important questions you would ask when taking a history? (5 Marks)
 - Describe your physical examination of the bull's genital tract. (5 Marks)
 - What infectious diseases should you consider? (5 Marks)
 - Briefly, how would you collect and evaluate a semen sample? (5 Marks)
7. a) What is the difference between mad cow disease and scrapie? (10 marks)

b) After rainy season, incidences of Bovine ephemeral fever increases. Outline the transmission, clinical signs and economic importance of the disease. (10 marks)