



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2013/2014

**SECOND YEAR FIRST SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN ANIMAL SCIENCE WITH
INFORMATION TECHNOLOGY**

(MAIN CAMPUS)

AAN 203: DIGESTIVE PHYSIOLOGY

Date: 28th November, 2013

Time: 11.00am - 1.00pm

INSTRUCTION:

- Answer ALL questions.

Duration: 2 Hrs

Answer ALL Questions

SECTION A: 25 MARKS

1. Briefly explain why horses and rabbits are considered hind gut fermenters and how they effectively utilize this physiological process (4 marks)
2. Briefly describe the processes of prehension, mastication and deglutination in sheep (6 Marks)
3. Explain briefly the four main functions of saliva in ruminant digestion (4 marks)
4. Describe the three major services that rumen microbes perform other than cellulose digestion (3 marks).
5. State the two key functions that contractions of gastric smooth muscles serve (2 marks)
6. List the four major gastric secretions and their functions (4 marks)
7. List any four disorders of digestion and related metabolism (2 marks)

SECTION B: 45 MARKS

8. Describe the mechanism of acid secretion in the stomach and its control. (15 marks)
9. Describe in detail the role of bile in fat digestion, absorption and cholesterol homeostasis (15 marks)
10. Discuss the role of the pancreas as an organ of digestion and the control mechanism of its exocrine secretions (15 marks)