



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
(MMUST)**

**MAIN CAMPUS**

**UNIVERSITY MAIN EXAMINATION  
FOR  
BSC. AGRICULTURAL EDUCATION AND EXTENSION  
ODEL PROGRAM  
2021/2022 ACADEMIC YEAR  
SECOND YEARS  
FIRST SEMESTER**

**COURSE CODE: SZL 211**

**COURSE TITLE: ANIMAL PHYSIOLOGY**

**DATE: 28/04/2022**

**TIME: 12-2 PM**

**INSTRUCTIONS TO CANDIDATES**

Answer ALL questions in section A and ANY TWO in B  
TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over. ►

**SECTION A: ANSWER ALL QUESTIONS (30 MARKS)**

**Question One (15 marks)**

- a) Define the following terms 9 Marks
- i) Homeostasis
  - ii) Physiology
  - iii) Extracellular fluid
- b) The farm manager in MMUST realized that three of their cows experienced homeostasis imbalance. Explain any three possible causes 6 Marks

**Question Two (15 marks)**

- a) Expatiate on two conditions that necessitate active transport in pigs 10 Marks
- b) Delineate on 2 features of isotonic solution in goats 4 Marks
- c) Give a reason why many substances dissolve in intracellular fluid 2 Marks

**SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)**

**Question Three (20 marks)**

Discuss the determinants of the rate of membrane transport in goats 20 Marks

**Question Four (20 marks)**

Discuss metabolism during starvation in rabbits 20 Marks

**Question Five (20 marks)**

Discuss 5 digestion hormones in livestock 20 Marks