

AAH 303



**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR
THIRD YEAR MAIN EXAMINATIONS
FOR THE DEGREE OF BSc. IN:**

ANIMAL PRODUCTION AND PROCESSING

COURSE CODE: AAH 303

COURSE TITLE: IMMUNOLOGY AND EPIDEMIOLOGY

DATE: 13.04.2023

TIME: 8 – 10 AM

INSTRUCTIONS TO CANDIDATES

Answer ALL questions in section A and ANY TWO questions in section B

MMUST observes ZERO tolerance to examination cheating

SECTION A: ANSWER ALL QUESTIONS (30 MARKS)

1. Giving examples, define the term immunity and differentiate between adaptive and non-adaptive immunity (5 marks)
2. Give the classifications of white blood cells giving examples of cells in each category (5marks)
3. Define the following terms (5 marks)
 - Epidemiology
 - Disease
 - Infection
 - Prevalence
 - incidence
4. Briefly explain the manner in which B-lymphocytes and T-lymphocytes act in immune responses. (5 marks)
5. Giving examples outline the host determinants of disease. (5 marks)
6. Name and define any five methods used in the control and prevention of diseases (5 marks)

SECTION B: ANSWER ANY 2 QUESTIONS (40 MARKS)

7. (i) Explain the ways in which complement fixation is achieved in immune responses (10 marks)

(ii) Briefly discuss neutrophil phagocytic activity in destroying invaders (10 marks)
8. Disease control and prevention involves employment of various strategies. Discuss these strategies and at what level they are applied (20 marks)
9. Define tissue grafting and explain the histopathology of tissue rejection (20 marks)