MAASAI MARA UNIVERSITY
REGULAR UNIVERSITY EXAMINATIONS
2019/2020 ACADEMIC YEAR
SECOND YEAR FIRST SEMESTER

SCHOOL OF NATURAL RESOURCES & ANIMAL SCIENCES

BACHELOR OF SCIENCE IN ANIMAL HEALTH AND PRODUCTION
COURSE CODE: AHP 2106
COURSE TITLE: IMMUNOLOGY

DATE: 9TH DECEMBER, 2019   TIME: 0830 – 1100 HRS

INSTRUCTIONS TO CANDIDATES
Answer **ALL** questions

This paper consists of 2 printed pages. Please turn over

Answer ALL questions.

IMMUNOLOGY [100 Marks]

1. The Immune system is functionally divided into the Acquired/Adaptive and Innate Immune system.

   a. Briefly explain 5 characteristics of the innate immune system **[10 marks]**
   b. Briefly explain 5 characteristics of the adaptive immune system **[10 Marks]**
   c. List 5 white blood cells [leukocytes] involved in the innate immune response. **[5 Marks]**

2. Briefly discuss the interaction of T- cell and an antigen **[5 Marks]**

3. Briefly describe the underlying principles of how the below serological tests listed here below, work.
   a. Enzyme Linked Immunosorbent Assay **[5 marks]**
   b. Precipitation test **[5 Marks]**
   c. Agglutination test **[5 Marks]**

4. Using a well labelled diagram describe the structure of an immunoglobulin. **[20 Marks]**

5. Name 15 animal diseases against which vaccines that are commonly administered, giving the corresponding animal species that are affected. **[15 Marks]**

6. Discuss the properties of an ideal vaccine. **[20 Marks]**