



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2019/2020 ACADEMIC YEAR**

**THIRD YEAR SECOND SEMESTER
EXAMINATIONS**

**FOR THE DEGREE OF
BACHELOR OF SCIENCE**

AND

BACHELOR OF EDUCATION (SCIENCE)

COURSE CODE: ZOO 3118/ZOO 410

**COURSE TITLE: BASIC IMMUNOLOGY/
INTRODUCTION TO IMMUNOLOGY**

DATE: 6TH DECEMBER, 2019

TIME: 0830-1030HRS

INSTRUCTIONS TO CANDIDATE

**ANSWER ALL QUESTIONS IN SECTION A AND ANY TWO IN SECTION B.
ILLUSTRATE YOUR ANSWERS WITH SUITABLE DIAGRAMS AND GIVE
EXAMPLES WHEREVER NECESSARY.**

Section A (30 marks). Answer ALL questions.

1. Distinguish between: **3mks**
 - a) Natural and Adaptive Immunity
 - b) Antigen and Antibody
 - c) Immunogen and Allergen

2. Giving examples, define the following terms: **3mks**
 - a) Primary Immune response
 - b) Adjuvant
 - c) Autoimmunity

3. The immune response is a homeostatic process. Explain. **3mks**

4. Describe the role of the spleen in immunity. **3mks**

5. Describe the structure and function of neutrophils. **3mks**

6. State the function of the secondary lymphoid organs. **3mks**

7. With the aid of a diagram, explain activation of immune cells. **3mks**

8. Name four types of immunogenic substances. **3mks**

9. State three ways by which antibodies carry out their actions. **3mks**

10. A Rh- woman got married to a Rh+ man, explain what happens during pregnancy. **3mks**

SECTION B 40 marks. Answer TWO questions.

11. Describe phagocytosis as an immune mechanism. **(20marks)**
12. Citing examples describe the interaction between innate and adaptive immunity. **(20marks)**
13. Highlight the structure and function of immunoglobulins. **(20marks)**
14. Explain the production of antibodies for vaccination. **(20marks)**

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