



KISII UNIVERSITY
UNIVERSITY EXAMINATIONS

SPECIAL/SUPPLEMENTARY EXAMINATIONS
SECOND YEAR EXAMINATION FOR THE AWARD OF THE DEGREE OF BACHELOR
OF SCIENCE IN PUBLIC HEALTH
SECOND SEMESTER 2024/2025
[AUGUST, 2025]

PHES 206: HUMAN IMMUNOLOGY

STREAM: Y2 S2

TIME: 2 HOURS

DAY: MONDAY, 9:00 - 11:00 A.M.

DATE: 18/08/2025

INSTRUCTIONS:

- 1. Do not write anything on this question paper.***
- 2. Answer question ONE in section A (Compulsory) and any other TWO questions from section B.***

SECTION A (40 MARKS)

ANSWER ALL QUESTIONS IN THIS SECTION

1. Summarize the factors not directly related to immune system that affect an individual's susceptibility to infections (5 marks)
2. With the aid of a labeled diagram demonstrate an overview of the Immune system (6 marks)
3. Briefly explain the role of the intact skin in innate immunity (7 marks)
4. Explain the characteristics of specific immunity (4 marks)
5. Briefly discuss the biological consequences of complement activation (6 marks)
6. Classify antigens based on their chemical nature. Origin and immune response (7marks)
7. Explain the functions of MHC class II (5 marks)

SECTION B (30 MARKS)

ANSWER ANY TWO QUESTIONS FROM THIS SECTION

8. Discuss the functions of the cells of the Innate immune system (15 marks)
9. Elaborate in detail the factors that influence immunogenicity (15 marks)
10. With regards to antibodies:
 - a) State any three immunoglobulin classes (3 marks)
 - b) Draw a well labeled diagram of a generalized immunoglobulin structure (6 marks)
 - c) Discuss the general functions of immunoglobulins (6 marks)