



EMBU UNIVERSITY COLLEGE

(A Constituent College of the University of Nairobi)

2015/2016 ACADEMIC YEAR

SECOND SEMESTER EXAMINATION

THIRD YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE
(ENVIRONMENTAL CONSERVATION AND NATURAL RESOURCES
MANAGEMENT)

SZL304 /305: APPLIED IMMUNOLOGY

DATE: APRIL 5, 2016

TIME: 02:00-04:00

INSTRUCTIONS: Answer any ten (10) questions (7 marks each)

1. Explain the following terms
 - a) Antigen
 - b) Antibody
 - c) Immunity
 - d) Immunogen
2. Describe briefly the complement activation pathways.
3. Illustrate the structure of an antibody and state its function.
4. Describe the process of phagocytosis
5. Describe the phylogeny and autogeny of cells of the immune system.
6. Discuss the types and mechanisms of hypersensitivity reactions.
7. Describe autoimmunity and explain three types' autoimmune diseases.
8. Outline the steps involved in preparation of a thin smear of blood for parasite examination.
9. Discuss the concept of ABO blood group and blood transfusion.
10. Compare and contrast Major Histocompatibility Complex (MHC) class 1 and 11 proteins.

11. Discuss the different types of organ transplants and rejection mechanisms
12. Describe the principle of enzyme linked immunosorbent assay (ELISA).

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