



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2009/2010

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION AND BACHELOR OF SCIENCE

SZL 408: APPLIED IMMUNOLOGY

DATE: Thursday, 8th April, 2010

TIME: 8.00 a.m. – 10.00 a.m.

INSTRUCTIONS:

Illustrate your answers with diagrams wherever appropriate

SECTION A: (40 marks)

Answer **ALL** questions.

1. Explain the principle upon which immunodiagnostic techniques are based.
2. Explain the enzymes used in DNA manipulations.
3. Explain the principle of DNA vaccines
4. “The foetus is a semi-allograft”. Qualify this statement.
5. Briefly describe the immunological consequences of vasectomy.
6. Describe briefly immune response towards transplants.
7. Explain the principle of polymerase chain reaction (PCR).
8. Briefly describe how one can prevent graft rejection.

SECTION B: (30 marks)

Answer any **ONE** question.

9. Give an account of major histocompatibility complex (MHC) molecules and antigen presentation.
10. Write an essay on monoclonal antibodies.