



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2007/2008

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

SZL 543: MOLECULAR IMMUNOLOGY AND IMMUNOGENETICS

DATE: TUESDAY, 10TH JUNE 2008

TIME: 9.00 A.M. – 12.00 NOON

INSTRUCTIONS: Answer any **FOUR** questions. Illustrate your answers with diagrams and give examples where appropriate.

1. Describe the following terminologies and their application:
 - a) Minisatellite DNA
 - b) Bioinformatics
2. Discuss prenatal diagnosis of human inherited genetic disorders.
3. Discuss the recombinant production of monoclonal antibodies from hybridomas and their use.
4. Describe the Southern blot technique and its application in the detection of sickle cell anaemia.
5. Describe the following terms:
 - a) Frameshift mutagens
 - b) Use of restriction endonuclease in recombinant DNA technology.
6. Discuss reverse transcription and the life cycle of a retrovirus.
