



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2010/2011

EXAMINATION ARTS MASTER OF SCIENCE IN IMMUNOLOGY

SZL 543: MOLECULAR IMMUNOLOGY AND IMMUNOGENESIS

DATE: THURSDAY, 1ST FEBRUARY 2011

TIME: 9.00 A.M – 12.00 NOON

INSTRUCTIONS:

Answer any FOUR questions. ALL carry equal marks. Illustrate your answers with diagrams wherever appropriate.

Answer any FOUR questions.

1. Describe how you would clone a gene of interest.
2. Discuss in details the process of protein synthesis.
3. Draw a well labelled diagram of a stretch of double stranded DNA showing the coding / non coding strands and the key signal sequences for transcription.
3. Discuss the status of research on gene therapy and its potential applications.
4. Discuss the diversity of antibody at gene level.
5.
 - a) Describe the different types of eukaryotic vectors.
 - b) Discuss the practical benefits for gene cloning.