



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2009/2010

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN MEDICAL LABORATORY SCIENCES

HML 108: BASIC IMMUNOLOGY

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DATE: MONDAY 21ST DECEMBER 2009

TIME: 8.00 A.M. – 10.00 A.M.

INSTRUCTIONS

SECTION A: Answer ALL Questions (10 marks each)

1. Describe in detail the Alternative tolerance complement pathway. (10 marks)
2. Explain how tolerance is induced in the body. (10 marks)
3. a) What is adaptive cellular immunity. (5 marks)
- b) Define the following terms: (5 marks)
 - i) antigens
 - ii) immunogens
 - iii) haptens
 - iv) epitopes
 - v) mitogens

Section B: Answer only two question. (20 marks each)

4. Discuss the various categories of cytokines. (20 marks)
5. a) With the aid of a diagram describe the structure of the spleen. (5 marks)
b) Discuss the mediators on innate immune response. (10 marks)
c) Outline the properties and functions of human white blood cells (5 marks)
6. a) Using an example describe type V hypersensitivity state. (5 marks)
b) Outline both the innate and adaptive immune responses to viruses. (5 marks)
c) Describe briefly the mechanisms of autoimmune diseases pathology. (5 marks)