



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2013/2014

**THIRD YEAR FIRST SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN PHARMACEUTICAL
SCIENCES, BACHELOR OF SCIENCE IN MEDICAL
BIOTECHNOLOGY AND BACHELOR OF SCIENCE IN MEDICAL
LABORATORY SCIENCE WITH INFORMATION TECHNOLOGY
(MAIN CAMPUS)**

PMT 311: MEDICAL IMMUNOLOGY

Date: 25th November, 2013

Time: 11.00 a.m. - 1.00 p.m.

PMT 311: Medical Immunology
Bsc Pharmaceutical Sciences, Bsc Medical Biotechnology and Bsc
Medical Laboratory Science

Section A 40 Marks

Answer all questions in this section

- Q1. Outline the polymorphonuclear cells of the immune system and describe their distinct morphological characteristics (5 marks)
- Q2. Give FIVE distinct characteristics of the innate and adaptive immune responses (4 marks)
- Q3. Differentiate the process of antigen recognition by T and B cells (5 marks)
- Q4. Describe the process of phagocytosis of antigens (5 marks)
- Q5. Give FIVE factors that may influence the ability of an immunogen to elicit an immune response (5 marks)
- Q6. Describe "immunological synapse" (5 marks)
- Q7. Describe the classical pathway of the complement system (5 marks)
- Q8. Outline the general biological properties of cytokines (5 marks)

Section B 30 Marks

Answer question NINE (9) and ANY OTHER TWO questions

- Q11. Explain the effector mechanisms involved in humoral and cell mediated immune responses (20 marks)
- Q13. Explain the mechanisms involved in type II and type III hypersensitivity reactions (10 marks)
- Q14. Describe the Two pathways of antigen processing and presentation (10 marks)