



**MASENO UNIVERSITY**  
**UNIVERSITY EXAMINATIONS 2013/2014**

FIRST YEAR FIRST SEMESTER EXAMINATIONS FOR THE  
DEGREE OF MASTER OF SCIENCE IN BIOMEDICAL SCIENCE  
(CITY CAMPUS)

**PMT 815: ADVANCED IMMUNOLOGY**

*Date: 25<sup>th</sup> November, 2013*

*Time: 2.00 - 5.00 p.m.*

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**PMT 815: ADVANCED IMMUNOLOGY**

Date: \_\_\_\_\_

Time: 3 HOURS

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Attempt question **ONE** and any other **FOUR** questions. Each question carries 20 marks.

1. Describe the architectural and cellular organization of a lymph node (20 marks).
2. Discuss the process of generating humanized monoclonal antibodies (20 marks).
3. Vertebrates have complex immune system. Discuss this statement in the context of evolution of the immune system in the animal Kingdom (20 marks).
4. Describe the developmental and maturation process of a T cell (20 marks).
5. Complement is important in recognition and control of pathogens. Discuss (20 marks).
6. Discuss various effector mechanisms involved in control of bacterial and fungal infections (20 marks).