



**RAJARATA UNIVERSITY OF SRI LANKA  
FACULTY OF APPLIED SCIENCES**

**B.Sc. (Special) Degree in Applied Biology**

**Third Year – Semester II Examination – April/May 2016**

**MIB 4209 IMMUNOLOGY**

**Time: Two (2) hours**

**Answer all four (4) questions**

**Use labeled diagrams where appropriate**

**1) Write short notes on;**

- a. receptors and responses of phagocytes in innate immunity
- b. DNA rearrangement of immunoglobulin genes
- c. possible causes of autoimmune diseases and potential treatment
- d. prozone effect

**(25X 4 marks)**

**2) a. Explain the general structure of T cell receptor complex.**

**(30 marks)**

**b. State the role of CD 28.**

**(30 marks)**

**c. Justify the need for variability in both MHC and TCR.**

**(40 marks)**

**3) a. Explain how the host cells avoid the membrane attack complex.**

**(30 marks)**

**b. List the C3 convertases in complement pathways and indicate their importance.**

**(30 marks)**

**c. Analyze the role of the complement system in immunity.**

**(40 marks)**

**4) a. Relate general structure of antibodies to their functions.**

**(35 marks)**

**b. With the aid of labeled diagrams illustrate IgA secretion and transcytosis.**

**(35 marks)**

**c. Discuss the advantages of clinical application of radioimmunoassay technique.**

**(30 marks)**